

MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXXVIII. No. 21.
WEEKLY.

BALTIMORE, DECEMBER 13, 1900.

\$4.00 A YEAR.
SINGLE COPIES, 10 CENTS.

Manufacturers' Record.

PUBLISHED EVERY THURSDAY BY THE

Manufacturers' Record Publishing Co.

RICHARD H. EDMONDS, President.

OFFICE: MANUFACTURERS' RECORD BUILDING,
BALTIMORE.

RICHARD H. EDMONDS,
Editor and General Manager.

THOMAS P. GRASTY,
General Staff Correspondent.

SUBSCRIPTION, - - - \$4.00 a Year.
To FOREIGN COUNTRIES, - - 25s. 6d. a Year.

BALTIMORE, DECEMBER 13, 1900.

The Buffalo & Niagara Investment Co. of Buffalo, N. Y., in a letter to the Manufacturers' Record under date of December 5, says:

Two weeks ago we put a small note in your paper: "Wanted—A Water-power." Please stop the same. We are simply astonished at the results—more than sixty replies so far, and from Sacramento, Cal., Providence, R. I., New York city and throughout the South. We are snowed up. Any doubt in our minds in regard to your paper being read throughout the United States is dispelled.

A Southern Success.

In a review of the work done by Mr. W. B. Smith Whaley since he established his mill-engineering business at Columbia, S. C., the State of that city shows that he has designed fourteen mills in South Carolina, one in Alabama and one in North Carolina, representing 539,676 spindles, 14,560 looms and \$8,500,000 capital. Four of the mills are at Columbia, and of three of them Mr. Whaley is the president, the Olympia being the largest single mill in the South. Twenty years ago the entire capital invested in cotton mills in South Carolina was a little more than half of the amount represented in the fourteen mills built in the State by the one firm since 1892. Mr. Whaley, who is not yet thirty-five years old, after his graduation as a mechanical engineer at Cornell University twelve years ago, determined, against the traditions of his family, to fit himself thoroughly for the textile business, and spent six months in New England, earning his own support and learning everything he could inside and outside the mills. His success, by his own efforts and ability, is an incentive for many a Southern boy.

To Help Industry.

Mr. W. C. Chevis, in assuming the editorship of the New Orleans States, announces that the energies of that paper will be exerted especially in helping on the industrial and commercial development of the South. He says:

Being firmly convinced of the fact that New Orleans, Louisiana and the entire South are now standing upon the threshold of the most amazing commercial and industrial development, and that with the proper co-operation upon the part of all concerned the South will inevitably become the great beehive of industry on this continent, every effort will be put forth by the States to

assist in this great and righteous work and to encourage all the forces that make for the accomplishment of this end.

This is a good text, and it is hoped it will be adopted by other newspapers beside the States.

The Charleston Exposition.

The United States Senate has passed the bill providing for the encouragement of the Interstate and West Indian Exposition to be held at Charleston next year. The bill provides for the free entry of goods from other countries intended for the exposition, for an exhibit by the government and for an appropriation of \$250,000 for the purpose. The bill has gone to the House of Representatives. If the bill does not become law at the present session of Congress it will be too late to accomplish its purpose, as the exposition is to open before the meeting of the next Congress. No time should, therefore, be lost in completing legislation on a measure which will give the national stamp and national assistance to an exposition bound to attract wide attention to the resources of the South, of Porto Rico and of Cuba, and to develop the foreign trade and the industries of the United States.

Wildcat Investment Schemes.

As a result of the addition to the ready cash of the South this year many glittering schemes are being advertised in the expectation that farmers and others may be tempted to invest money in undertakings promising on their surface quick fortune. Some of the propositions are not unlike those which were widely advertised at the beginning of the rush to the Klondike, and which come to the front whenever it is believed men have ready money which they may be induced to relinquish quickly by promises of rich returns. Before considering these "boomy" offers for investment in gold mines in distant regions, however brilliant the promises, Southerners with money to invest will do well to look into opportunities for investment close at home. New methods of ore reduction are giving new and vigorous life to gold mining in Georgia and other States. Iron and coal mining, lumbering, cotton-mill building and other Southern industries also present splendid chances for safe investment and sure returns. Southerners had better put their surplus money into such undertakings which have demonstrated their ability to succeed and to dismiss from their minds offers which will certainly take their money from the field of Southern development, and, perhaps, make no return. Many millions of hard-earned Southern money have gone into wildcat mining schemes, into "get-rich-quick" projects promising to return impossible profits, and the time has come for the press and the business people of the South to make a vigorous effort to protect the small investor and to save him from being fleeced by such schemes.

Cotton Mills as Missionaries for the South.

In a report before the last meeting of the Maryland Baptist Association relating to the industrial progress of the South the following statements were made:

This industrial movement brings mightily before us certain facts which bear upon the work of our Home Board. The workers in the mills and factories must come from the country, which has always been the peculiar home of our Baptist brethren. Leaving the freedom of their country life, they will be brought into new and strange relations with problems too great for them. They will be degraded from independent farmers into factory laborers.

It is remarkable that after fifty years of factory life in the South it is possible for anyone who has kept his eyes open to commit himself to such an egregious error of judgment, that the class of persons from whom the operatives of the South are recruited can be degraded by becoming factory laborers. Such an opinion is contrary to that of men who lived when cotton manufacturing began to assume importance in the South, and who were eminently qualified to view the subject from the standpoint of intimate knowledge, and of men of today similarly equipped. When the South came under the industrial impulse fifty or more years ago the question of the supply of mill labor was a vital one, and was given serious study by Southern industrial leaders. They talked and wrote about it, and the printed records of that time are full of facts showing what class of whites was expected to furnish the operatives and revealing the effects upon them of entering mills.

It is well known that the non-slaveholders of the South represented about two-thirds of the white population. Discussing the benefits of the introduction of manufactures into the South and Southwest, an observer of this period said that the rural non-slaveholders had generally but very small means, and that their land was so sterile that a scanty subsistence was all that could be derived from its cultivation; that this condition depressed the moral energies of the poorer classes, leading many of them to settle into habits of idleness and to become the almost passive subjects of all its consequences. He said:

I lament to say that I have observed of late years that an evident deterioration is taking place in this part of the population, the younger portion of it being less educated, less industrious, and in every point of view less respectable than their ancestors.

By manufactures he argued that a way would be opened to wealth and respectability for these people, and he added:

By such a change the wealth and moral power of the Southwest would be increased to an almost indefinite extent, the sources of human comfort would be greatly enlarged and the liberal arts—the redness of man—would abound in the land.

William Gregg of South Carolina, urging in 1845 the erection of steam cotton factories, said that they would

employ the poor and needy of Charleston, and "the hundreds who seem to have little else to do than follow our military parades through the streets," and in the State, "our poor and half-starved population, whose condition could not but be improved in working up a part of our cotton into cloth," asserted that hundreds of women might be found in Charleston in wretched poverty unable to procure work by which they would be glad to earn a decent living, and added:

Shall we pass unnoticed the thousands of poor, ignorant, degraded white people among us who, in this land of plenty, live in comparative nakedness and starvation? Many a one is reared in proud South Carolina from birth to manhood who has never passed a month in which he has not some part of the time been stinted for meat. Many a mother is there who will tell you that her children are but scantily supplied with bread, and much more scantily with meat, and if they be clad with comfortable raiment it is at the expense of their scanty allowance of food. These may be startling statements, but they are nevertheless true, and if not believed in Charleston, the members of our legislature who have traversed the State in electioneering campaigns can attest their truth.

It is only necessary to build a manufacturing village of shanties in a healthy location in any part of the State to have crowds of these poor people around you seeking employment at half the compensation given to the operatives at the North. It is indeed painful to be brought in contact with such ignorance and degradation; but, on the other hand, it is pleasant to witness the change which soon takes place in the condition of those who obtain employment. The emaciated, pale-faced children soon assume the appearance of robust health, and their tattered garments are exchanged for those suited to a better condition. If you visit their dwellings you will find their tables supplied with wholesome food, and on the Sabbath, when the females turn out in their gay-colored gowns, you will imagine yourself surrounded by groups of city belles. How easy would it be for the proprietors of such establishments, with only a small share of philanthropy, to make good use of the school fund in ameliorating the condition of this class of our population, now but little elevated above the Indian of the forest. The cause of this degradation and poverty will hereafter be noticed; it is an interesting subject, and one that ought to engage the attention of every philanthropist and Christian. It is perhaps not generally known that there are 25,000 white persons in this State above the age of twelve years who can neither read nor write; this is about one in every five of the white population.

Is it any wonder that Mr. Gregg added that if the industrial life should once be set in motion "will our miserably poor white population at once rise from their ignorance and degradation."

In 1852 J. G. Gamble, arguing the erection of mills in the cotton field, said:

But this scheme of manufacturing the cotton crop has another aspect which commends itself to the favor of the patriot, philanthropist and Christian. In the cotton States there is a numerous white population scattered over the pine barrens and subsisting by hunting and raising stock. From their dispersed condition they cannot have either schools or churches, and their children must grow up without religion and ignorant of even the alphabet. What greater curse can be inflicted upon a republic than an ignorant and irreligious population? Such, however, must be the fate of large portions of the Southern States unless a remedy can be found. That remedy will be furnished by the erection of cotton factories

around which will be collected our piney-wood population, and schools and churches will be supplied.

Governor Hammond of South Carolina, in his famous address in connection with the opening of the South Carolina Institute for the Promotion of Agriculture, the Mechanic Arts and Manufactures, contended that although it is undoubtedly true that frailties of human nature are more fully displayed when men congregate in cities and factories, while the purest morals are fostered by rural life, nevertheless the compensations of association were great. Some of these compensations were described by him as follows:

According to the best calculation which, in the absence of statistic facts, can be made, it is believed that of the 300,000 white inhabitants of South Carolina there are not less than 50,000 whose industry, such as it is, and compensated as it is, is not, in the present condition of things, and does not promise to be hereafter, adequate to procure them honestly such a support as every white person in this country is and feels himself entitled to. And this, next to emigration, is perhaps the heaviest of the weights that press upon the springs of our prosperity. Most of these now follow agricultural pursuits in feeble yet injurious competition with slave labor. Some, perhaps, not more from inclination than from the want of due encouragement, can scarcely be said to work at all. They obtain a precarious subsistence by occasional jobs, by hunting, by fishing, sometimes by plundering fields and folds, and too often by what is in its effects far worse, trading with slaves and seducing them to plunder for their benefit. If the ancient philosopher had the slightest grounds for saying that it would require the plains of Babylon to support in idleness 5000 soldiers and their families, we may infer how enormous a tax it is on our resources to maintain to the extent we do now and are likely to have to do, directly and indirectly, our unemployed or insufficiently employed poor.

From this class of our citizens 35,000 factory operatives may certainly be drawn as rapidly as they may be called for, since boys and girls are required in large proportions for this business. Nor will there be any difficulty in obtaining them. Experience has shown that, contrary to general expectation, there exists no serious prejudice against such labor among our native citizens, and that they have been prompt to avail themselves, at moderate wages, of the opportunity it affords of making an honest and comfortable support and decent provision for the future. The example thus set, of continuous and systematic industry among those to whom it has heretofore been unknown, cannot fail to produce the most beneficial effects not only on their own class, but upon all the working classes of the State.

Bearing upon this subject are the words of Robert B. Howison in his history of Virginia, published in 1848, as follows:

It is with pain we are compelled to speak of the horrible cloud of ignorance that rests upon Virginia. In the eastern section there are 29,863 and in the western 28,924, making a total of 58,787 white persons over twenty years of age who cannot read or write. This, however, is not all. It is computed that there are in the State 166,000 children between seven and sixteen years of age, and therefore fit for school. Of these, about 28,000 poor children attend the free and Lancasterian schools an average of twelve weeks in the year for each child. Twelve thousand more children are sent to colleges, academies and classical schools. The remaining 126,000 attend no school at all, except what can be imparted by poor and ignorant parents. This deplorable condition has long been felt and deplored by Virginia's most virtuous sons. Efforts have been made to ameliorate it. Education conventions have assembled, and many animated debates have taken place. The legislature has moved from time to time, and during the session of 1845-46 its movement was decided and beneficial. Nevertheless, the evil remains almost untouched.

Testimony thus far quoted has been from Southern men. It is reinforced by that of such an intelligent observer as United States Senator Charles T. James of Rhode Island, personally interested in Southern industry. Writing from experience and observation about

the prospects of cotton manufacturing in the South, he said:

It is not to be disguised, nor can it be successfully controverted, that a degree and extent of poverty and destitution exist in the Southern States among a certain class of people almost unknown in the manufacturing districts of the North. The poor white man will endure the evils of pinching poverty rather than engage in servile labor under the existing state of things, even were employment offered him, which is not general. The white female is not wanted at service, and if she were she would, however humble in the scale of society, consider such service as a degree of degradation to which she could not condescend, and she has, therefore, no resource but to suffer the pangs of want and wretchedness. Boys and girls by thousands, destitute both of employment and the means of education, grow up to ignorance and poverty, and too many of them to vice and crime. This picture is no exaggeration; it is strictly true in all its details. * * * The writer knows from personal acquaintance and observation that poor Southern persons, male and female, are glad to avail themselves of individual efforts to procure a comfortable livelihood in any employment deemed respectable for white persons. They make applications to cotton mills, where such persons are wanted in numbers much beyond the demand for labor, and when admitted there they soon assume the industrious habit and decency in dress and manners of the operatives in Northern factories. A demand for labor in such establishments is all that is necessary to raise this class from want and beggary, and, too frequently, moral degradation, to a state of comfort, comparative independence and moral and social respectability. Besides this, thousands of such would naturally come together as residents in manufacturing villages where, with very little trouble and expense, they might receive a common school education instead of growing up in profound ignorance.

The industrial progress of the South was rudely interrupted by the war, but when the pace was again set the same class came forward to take their places in the mills. The supply has not been exhausted, if we can rely upon the statements made in the last two or three years by men of authority.

From a sympathetic standpoint the Rev. John E. White of Raleigh, corresponding secretary of the North Carolina State Baptist Convention, prepared a little pamphlet not long ago on the Southern mountain region, not including West Virginia, in area 150,000 square miles, with a population of 1,919,217. He traces the origin of these people, corrects many statements as to their character, asserts that they are not degraded, but have simply not been graded up, and says:

The utmost that can be said about the people of the mountains in comparison with other people is explained in the full meaning of the word isolation. Connection with the outside world, with its ideas and ideals, with its agitations and enthusiasms, which is so potent a fact with other people through the daily newspaper and the telegraph, has never connected with the mountains. There are cities, of course, and smaller towns along the railroads with all the advantages of communication, but the vast billows of mountain land are still an unannexed solitude. When you catalogue the new ideas born during the nineteenth century, the inventions and mechanical adjustment of natural forces, such as the application of electricity, the new doctrines of life, evolution, etc., and the whole realm of sociological thought around "the Fatherhood of God and the brotherhood of man," and then look into the mountain life and thought and mark the vacancy, you can appreciate the meaning of isolation.

Another North Carolinian, himself mountain-born, the Rev. Dr. Robert F. Campbell, in a statement of mission work among the mountain whites in Asheville presbytery, not in criticism of the great body of neglected population, but in agitation for relief of a part of it, said:

There are large sections of country in which hundreds of people live without the care of a physician. Old women administer their herbs and quacks practice their superstitious arts. The physical suffering in

these regions, much of which might be relieved by simple remedies and surgical operations, is distressing.

Profanity is common among men, women and children. Mothers are sometimes heard calling on God to damn their own children's souls. * * * The women and children do nearly all the work. A majority of the men are idle most of the time. Their most serious employment is hunting or fishing or running illicit distilleries and imbibing the blood of John Barleycorn. In some regions a young man has reached the summit of his ambition when he has learned to pick the banjo, owns a dog and carries a pistol and a bottle of whiskey.

In many homes there were seen no evidences of affection between different members of the family. Children are governed by brute force until they become strong enough to fight their own way. The aged are neglected and despised.

Many children learn to use tobacco before they can talk, and are stunted in their growth.

Bastardy is common, and is accounted no disgrace. Laxity in such matters discounts a man's character no more than in some of the fashionable city circles.

In a recent address before the State Normal College of North Carolina Mr. Walter H. Page made the following testimony:

Let any man whose soul is not hardened by some wornout theory of politics or of ecclesiasticism go to the country in almost any part of the State away from the towns and make a study of life there, especially the life of the women. He will see thin women and wrinkled in youth from ill-prepared food, clad without warmth or grace, living in untidy houses, working from daylight to bedtime at the dull round of weary duties, the slaves of men of equal slovenliness, the mothers of joyless children—all uneducated, if not illiterate. Yet even their condition were endurable if there were any hope, but this type of woman is encrusted in a shell of dull content with her lot; she knows no better, and can never learn better—never point her children to a higher life. If she be intensely religious, her religion is only an additional misfortune, for it teaches her, as she understands it, to be content with her lot and all its burdens, for they only prepare her for the life to come. Some men who are born under these conditions escape from them; a man may go away, go where life offers opportunities, but the women are forever helpless.

And this sight every one of you have seen, not in the countries whither we send missionaries, but in the borders of the State of North Carolina in this year of grace. Nor is it an infrequent sight. There are thousands and thousands of such women in our population.

Justification for these extended extracts is had in the necessity for a clear understanding, particularly at this time, of the past and present of a class upon which so much of the future of the South depends. They show that the mill employes before the war were recruited from that element of the population most hampered by the institution of slavery, of the same stripe as the New Englanders, who, free from such a bane, built up the industries of their section. They might be regarded as independent if independence meant lack of opportunity to gain a healthy living, to enjoy having elementary instruction or the benefits of systematic, organized religious work. Many could be called farmers and the children of farmers only by violent strain of the imagination. Their willingness to take work when and where they could get it showed what kind of stuff they were made of. They were not idlers by nature or sunk in listlessness and viciousness. Their ability to secure employment brought them, in some cases, in close touch with church and school, and certainly gave them an education not necessarily confined to book-learning, but coming with the widening of their range of vision and contact with their fellows. In addition to the mountain and hillside people who are now flocking to the mills and finding their first opportunity of regular employment, there are thousands of

eminently respectable poorer people, some of whom have been tenant farmers, some, perchance, who have failed to make a living, though owning a small farm of poor soil, and others found in and around every town, to whom the cotton mill comes as a great blessing, as it opens a new field for work which they had never known before.

Under the new regime as the most casual observation of conditions in the mill centers adjacent to Baltimore, at Charlotte, at Spartanburg and other points in the Carolinas, Georgia, Alabama and Tennessee, the cotton mill has given the chance to thousands of boys and girls and men and women which they needed to start them upon the road to better physical and mental conditions, even though the growing agitation for compulsory education of children finds many parts of the South facing a lack of funds and other facilities for proper education, even of those willing to go to school. It shows many a man who has advanced far up the grade, and who, of his own native talent, has taken a position advanced beyond that of the masses, sharing his willingness to work, and in smaller degree his adaptability to industry. The possibilities in this direction still exist. Thousands of Southern whites are capable of realizing them, and this because the cotton mill has come to stay and is forming at many a point the center for the exertion of influences which work for righteousness. There are evils connected with the change from the isolation described by Rev. Dr. White, but they can hardly equal those accompanying such isolation here and there described by the Rev. Dr. Campbell. Indeed, some of the evils, such as stationary vagrancy and the habit of worthless men remaining dependent upon the women folk or children of tender age, have been brought to the mill centers. For them the mill is not responsible. And, happily, mill-owners themselves are seeking means whereby they may be mitigated or abolished, thus removing obstacles in the way of a better enjoyment of school and library facilities and of occasions for healthy social intercourse which the mills have already afforded.

That the material condition of the operatives and their families has been greatly bettered should require no argument. The ethical and moral results cannot be stated in figures. Certainly mill life has not been demoralizing, and does not promise to become so. Publicity of life in a mill town tends to counteract the tendencies to lapses from virtue which in isolation might be condoned or concealed, even were opportunity not less frequent or inclination not weaker. Hon. Carroll D. Wright, United States commissioner of labor, who has had unequalled opportunities to observe, asserts that extensive investigation in this country and abroad teach that immoral lives are less frequent among the factory population than among any other class in the community, and in the belief that factories are graders-up of men and women he says:

The charge that the factory breeds immorality among women is not true, and cannot be sustained by any facts that have ever been collected. This one condition constitutes the factory an important element in social life, for the women who are there and are working for low wages—lower than any of us would like to be paid, but which are governed according to economic conditions and law—are working honestly and faithfully and living honest and virtuous lives. It must be so. Women cannot work

eight or ten hours or twelve or more hours in a cotton factory and live a dissolute life the rest of the day.

Again, steady labor, a prevention itself of evils born of idleness, by its rewards, however small, but better than nothing, enables men and women to be better fed, more regular in habits and more decent in dress and household arrangements than they could expect to be if the life of isolation in the mountains should continue indefinitely. Ability to lead a moral life is not entirely independent of having sufficient to eat and of keeping clean and having comfortable clothing.

One more point is to be considered—religion. Here, too, the assembling of the people within a small compass increases the readiness with which the preacher or teacher may reach them. The task of the mountain circuit rider or of the evangelist is herculean in comparison with that of the minister of the mill town. If church organization fails to accomplish what it expects in the mill town, ought it not to look within itself for the cause rather than to the supposed degeneracy of the mill workers, who are grading up in every other respect, and who, after all, may not be irreligious? Is there not danger that in fixing too much attention upon distant evangelization the more promising opportunities close at hand may be neglected and misunderstood?

English Iron Men Looking to America.

The apparently well-founded report that one of the greatest shipbuilding concerns of England is negotiating with a view to forming a combination with the Cramp Shipbuilding Co. and possibly one or two leading steel and armor-making concerns is doubtless the beginning of a movement predicted several years ago by the Manufacturers' Record, in line with its announcement last week that the well-known firm of steel manufacturers, Seaborn & Dieckstahl, Limited, of Sheffield, England, has obtained an option on land in America with a view to building a \$3,000,000 to \$5,000,000 steel plant. At that time, in pointing out the supremacy which the iron interests of America were destined to hold in the world's trade, a statement was quoted from a leading English iron expert to the effect that these conditions would cause the great iron and steel interests of England to become largely interested in kindred enterprises in America. The English iron manufacturers and shipbuilders, who have dominated the world's trade, seeing that they could no longer compete on equal terms with America, rather than give up the fight, would place themselves on equal grounds by the purchase and development of similar enterprises at the most favored points in the United States. The beginning of this movement, if it culminate, as it is likely to do, in the practical ownership by English people of the Cramp ship-yard and armor and gun-making concerns, will attract the world's attention to the superior advantages of the United States. Other English concerns will naturally follow. The men who have dominated the metallurgical interests of the world for so many years, whose trade ramifications extend to every civilized country, are not the men to yield to America's supremacy without sharing in it by becoming a factor in America's production. To these giants in industry it is not very material whether their source of production is in England or in Pennsylvania or in Alabama, but it is very

essential that wherever located they shall be able to produce in competition with any other country. Though their works might be located in this country, and we get the benefit of their great developments and the increasing employment of people, the management might still be in England. The people of America should welcome the incoming of this capital, not only for the material benefits which would come to our own country, but for that closer kinship into which the United States and Great Britain would be drawn. If England cannot compete with us in the world by producing its iron and steel and building its ships at home, it will share in our trade by investing its capital in the development of our iron and steel interests and the building of ships in this country. Even now it is understood that the final decision of the United States to construct the Nicaraguan canal will be followed by the location at some port on the Gulf of an immense ship-yard by one of the greatest shipbuilding concerns of England.

These conditions are of peculiar interest to the South. In its ability to produce iron and steel in competition with the world its advantages must ere long be fully realized by English capital, which will then take an active part in the broadest development of the iron and steel interests of this section.

Bearing on this subject the New York Sun has a dispatch from its London correspondent, in which it is said:

It may or may not be true that the Cramp Shipbuilding Co. and Vickers' Sons & Maxim will consolidate, but it is a fact that certain leaders of England's greatest industry are contemplating a radical change of policy which is of the utmost importance to American interests. They realize the hopelessness of competition in certain lines with American manufactures under the present industrial condition of this country. They know also that those conditions can be changed only by a gigantic struggle with the labor unions, which must bring disaster to both sides. They therefore are seriously considering the project of buying up the best American enterprises and transferring the greater part of their business to the American factories thus purchased.

This policy involves the confession that American competition is invincible, but it also spells ruin to the industrial interests in several lines of British trade. The question of its advantage or disadvantage to America is a matter of the greatest moment. There is not the slightest doubt that the most enlightened English manufacturers understand far better than the Americans themselves the vast opportunities within reach of the United States for securing a great share of the world's trade. Moreover, Englishmen are accustomed to make plans extending much farther into the future than those of the average American business man.

Pointing to South Africa.

United States Consul-General J. G. Stowe of Cape Town continues his urgent suggestions that the United States have a splendid opportunity for the trade in South Africa. He writes that large orders of articles needed by the community preparing for business after the close of the war are being placed in the United States. They include sole leather, building hardware and materials, household goods, machinery and timber, while a new trade in granite wool for refrigerators, cold-storage plants, etc., has developed. He says that seeds, agricultural implements, cattle and sheep and household necessities must be provided immediately by the British government to meet the wants of the people, and that this demand means trade for the United States. Mr. Stowe is now on his way to this country, and may be expected while here to continue the good work which he has maintained at Cape

Town, even during a cessation of trade due to the South African war. American manufacturers ought to need no further hints.

Some of them have already entered the field. The British and South African Export Gazette records the purchase or ordering in recent years of American locomotives, passenger cars, pressed-steel platform cars and special frogs and switches for the Cape Government railways, and says that since June 30, 1899, America has shipped 40,691 tons of steel rails, valued at more than \$800,000, to South Africa. The editor of the Gazette, recognizing that the price of the South African imports was not an unimportant factor, nevertheless points to a suspicion in the minds of manufacturers that anti-British tendencies on the part of some of the Cape officials are responsible for favoring competitors of British manufacturers. Whatever the cause, American manufacturers should exert themselves to increase their advantage.

An Ally of Commerce.

Commenting upon consular reports recently issued by the State Department relating to foreign markets for American coal, the Colliery Guardian of London quotes in full the letter of Thomas W. Cridler, third assistant secretary of state, which largely explains the frequent and comprehensive reports on the prospects for American coal abroad which have recently been published in the advance sheets of the consular reports issued by the Department of State. The Guardian takes the results of the investigation as a warning to the commercial interests of Great Britain. It says that the mass of information which America has obtained relating to the coal trade in England is astonishing and far in advance of the collected details there, and it suggests that the English government should be induced to bestir themselves, and by adopting a system similar to that employed in America, to assist substantially in furthering the interests of British trade.

Now and then the methods of the State Department are sharply criticised. The criticisms, however, refer more and more to methods of the past. Certain it is that in recent years, especially since the adoption of the plan of publishing daily advance sheets of the consular reports, the department has become a valued ally of the commercial and industrial interests of the United States.

Not Promotive of Good.

A correspondent of the Manufacturers' Record sends us the following verbatim copy of a letter recently received by a leading manufacturing concern and signed by a man claiming to be the secretary of an improvement company of a Southern town:

Answering yours of late date will say that I will consider your application for work on our New Factory if you will send me twenty five \$25.00 Dollars in the Way of Compensation to work for your Interest. I will not use my Influence in No way for any Company Without Pay. I will be pleased to work you up Some Business on Receipt of the Above Amount Otherwise I Could not Consider It. Respect &c

The Manufacturers' Record, in publishing this letter, has suppressed the name of the secretary and of the improvement company which he is supposed to represent, in the belief that the ignorance displayed in the letter itself is the excuse for the possibility in it of injury not only to the town having such an one as secretary of the

improvement company, but indirectly to the whole South. When business men make a proposition they are accustomed nowadays to be met on a business basis. If they received many letters like that quoted above they would be given a wrong impression about the South which may be conveyed to other persons who might contemplate considering the claims of improvement companies for their respective communities.

A dispatch from New Orleans states that Northern manufacturers have expressed a desire to equip the new textile school of the Mississippi Agricultural and Mechanical College with the necessary machinery, representing between \$25,000 and \$30,000. The last legislature of Mississippi appropriated \$10,000 for the establishment of the school, and this generosity of the manufacturers, which has also been shown toward other Southern textile schools, ought to encourage Southern lawmakers and Southern manufacturers to sustain the efforts of far-seeing men to provide technical training for the rising generation.

The re-election of Col. Henry G. Hester as secretary of the New Orleans Cotton Exchange after thirty years' continuous service in that position is a recognition of the valuable work he is doing for everybody interested in American cotton. His weekly reports of the condition of the cotton market and his annual survey of cotton growing, cotton buying and cotton manufacturing are authoritative guides for students of the situation and for men practically occupied in the many channels touched by the great staple. May he have many years to continue his valuable work.

The demagogic persecution of the Standard Oil Co. in Ohio, which has been carried on for several years, has been ended by the decision of the Supreme Court of the State in favor of the company. The case has been used by the former State's attorney to keep his name conspicuously before the public posing as the defender of the people. It is gratifying to all men who are not carried away by this kind of demagogic populism that the Supreme Court has finally closed the case against this attack.

Would Manufacture Ice.

A correspondent of the Manufacturers' Record is endeavoring to select a Southern town not yet supplied with an ice machine suitable for the location of such a plant with a capacity of ten to fifteen tons.

Abrasive Manufacturing.

Mr. S. A. Jones, general manager of the National Abrasive Manufacturing Co., Waynesville, N. C., in a letter to the Manufacturers' Record claims that this company has recently been reorganized, with Mr. Percy Thompson of New York as president and himself as general manager, the office of the company having been moved from Philadelphia to Nos. 40 and 42 Wall street, New York. He adds:

We have today the strongest and best equipped abrasive company in the world. We control the entire importation of Turkish emery into this country. We have an unlimited base of supply of ruby on Sugar Loaf and Double Top mountains. We have an unlimited base of sapphire corundum in Jackson and Clay counties, and an unlimited base of supply of garnet for garnet paper. We control the output of factories manufacturing artificial corundum. We expect to be operating three different plants in

North Carolina in the early spring with a daily output of 100 tons at the sapphire mines and 100 tons at the ruby mines. We are closing leases for the operation of our iron, pyrites, copper and kaolin deposits. We have about 34,000 acres of land covered with timber adjacent to the 16,000-acre tract previously secured. The timber is to be taken off by a strong lumber company, which is now consolidating with a pulp and paper company that will begin in the spring the building of a \$1,000,000 plant for operation on the property.

These are all pretty strong claims, but we quote them from Mr. Jones' letter.

The Cullom Bill and the League of National Associations.

The Northwestern Miller of Minneapolis, in referring to the recent meeting of the "League of National Associations," says:

"The convention held this week," says an esteemed contemporary which advocates the Cullom bill, 'accomplished its purpose to the fullest extent.' As its chief object seemed to be to provide comfortable winter quarters in Washington for the prime mover of the whole thing, and as we are told that Mr. Barry was appointed 'manager of the work at Washington,' and that the executive committee 'decided to make a pro rata assessment sufficient to raise a fund of \$5000 to meet the expenses of the lobbying committee,' it is evident that our contemporary's statement is eminently correct. The Northwestern Miller gives in this issue a report of this convention, which is the only correct one yet published; the other, which has appeared in our esteemed contemporary, has been carefully expurgated so as to leave the impression that the meeting was harmonious, while it was indeed far from being so. Mr. Barry, who announces his intention to proceed to Washington, where 'he will open national headquarters,' granted the favor of an interview to the Evening Wisconsin the other day, in which he made several characteristically inaccurate statements. Among other things he said 'the convention was the largest and most representative body of shippers ever held in this country.' As a matter of fact, it was neither large nor representative. By actual count there were but thirty-nine people in attendance, and these were chiefly functionaries of the Barry type, and not actual shippers. There were two men present who actually represented something: E. C. Simmons of St. Louis, president of the Simmons Hardware Co., the largest establishment of the kind in the world, and immeasurably the largest shipper present, and F. B. Thurber of New York, both men of national reputation and practical experience.

"The intolerant temper of the convention was displayed when a cut-and-dried, previously-prepared memorial to Congress was introduced, and Mr. Simmons objected to it. Mr. Simmons is a highly respected citizen of St. Louis, and a gentleman who honors any convention he may attend by his presence. As the head of a large concern which has done more to extend the business reputation of the city in which it exists than any other corporation therein, as a large individual shipper and as a student of freight matters and interstate commerce, it would be fair to suppose that he would be listened to in any convention of shippers with respect and attention, and that his suggestions would at least be considered. In a convention of real shippers this would undoubtedly have been the case, but in a gathering largely composed of imaginary shippers, salaried functionaries and professional secretaries the contrary action might readily follow. So it was in this convention of thirty-nine individuals. Mr. Simmons dared to say that he did not believe that the convention was as repre-

sentative of the shipping interests as was claimed for it, and he did not favor the Cullom bill. A gentleman named Boswell of Quincy, Ill., hitherto unknown except locally, intimated that if Mr. Simmons did not believe as the true followers of Bacon and Barry did he was at liberty to withdraw from the meeting. Mr. Simmons promptly and very wisely did so, it being quite evident that, as a successful and practical man, he was out of his element in such a convention.

"Again the partisan character of the dominant element in the assembly was shown when one of the delegates moved that Mr. Cochran, general solicitor of the Missouri Pacific-Iron Mountain railway systems, be allowed to discuss the subject with Mr. Decker of the interstate commerce commission for the benefit of those present. Sixteen favored this move, but it was promptly squelched and the delegate who made the motion withdrew from the meeting in disgust. Shortly after this incident Mr. F. B. Thurber of New York, a gentleman widely known and the first-named delegate to the convention from the National Board of Trade, ventured to read an address outlining his views and advising that shippers work in harmony with the railroads. He moved the appointment of a committee of five to confer with an equal number of railway men to ascertain if there were not grounds upon which they could agree in order that the passage of the bill might be insured. This resolution was received in ominous silence, but was finally seconded by a gentleman named Morehouse from Toledo, in order that it might get before the house. This done, Mr. Morehouse, who seems to have a pretty temper and choice notions as to liberty of speech, proceeded to call Mr. Thurber a wolf in sheep's clothing. 'Why, Mr. Chairman,' said this broad-minded person, 'the railroads are our enemies in this matter, and to ask their help would be the height of folly. It remains for us to assert our rights, and I violently oppose this resolution.' The resolution was, of course, lost, and by this time all of those who had ideas differing from those of the leaders having withdrawn, the usual resolutions, carefully prepared in advance, were easily passed. This was the meeting which Mr. Barry characterized in his interview as 'harmonious and enthusiastic.'

"Some statements made in the memorial to Congress passed by the convention are, to put it very mildly, notoriously incorrect. For instance, one to the effect that the bill 'has been freely discussed in the public press, with almost unanimous approval,' is not true by any means. Another, that 'the demand for its immediate enactment from all sections of the country seems to be universal,' is equally false. Mr. E. C. Simmons, speaking for St. Louis, asserted that he could concentrate four-fifths of the business interests of that city against the bill. It is a great pity that the amiability and good nature of such an excellent gentleman as Mr. E. O. Stanard allowed him to be prevailed upon to act as chairman of such a meeting. He can really have but little sympathy with the real object behind this movement. Of course, the interstate commerce commission was represented. Its assistant secretary, Mr. Decker, was on hand to encourage the work which has for its object the placing of American railways under the absolute control of seven men. In an interview in a St. Louis paper, published subsequent to the meeting, Mr. E. C. Simmons said a few plain things about this so-called convention which the Northwestern Miller heartily endorses. Elsewhere his remarks are quoted in full. We look in

vain for them in the columns of our St. Louis contemporary, yet it cannot be denied that Mr. Simmons is a shipper whose success in business depends entirely upon the securing of competing rates.

"We cannot forbear quoting a few extracts from Mr. Simmons' interview. He said:

"I object to the proposed bill because its rate-making clause, providing that rates for all the railroads in this country should be made by seven men, gives that set of men too much power to be safely intrusted to any set of men. I believe it would build up a political machine the like of which the world has never seen, and would perpetuate one party in power forever. I think is unfair and impracticable. In the first place, the transportation interests of this country, with their diversified ramifications, are too extensive for any set of seven men to make and maintain rates. With the interests of the country and the interests of the railroads so ramified and extensive there is bound to be some discrimination in the matter of rates, for what is discrimination against one point is bound to be in favor of that point's competitor, and I do not believe the angel Gabriel could come back to earth and make favorable all railroad rates without discrimination. If the seven commissioners contemplated in the bill make freight rates through their agents, do you not see what a great political machine may spring up? I have made a study of freight rates and of interstate commerce, and in that bill I do not think there is one clause to recommend it. It is a bad bill, and, in my opinion, an unwise one. The shippers of the country have not yet spoken on the bill, and that was what I meant in the conference by saying the fight would be taken to the Senate. I would take the initiative in making this fight except that I am in bad health, and personally would not be able to devote the energy to the fight that its seriousness would demand, but we will co-operate with other shippers and we will be heard from in the Senate when the bill comes up for passage. Where the bill originated I do not know. It is my opinion, not hastily formed, but made after a deep thought in the matter, that the bill is unwise, and its enactment would be a mistake, and that even its most earnest champions would recognize it as a mistake before the passing of the first twelve months after its enactment.'

"Mr. Simmons has never seen and does not read the Northwestern Miller, but his remarks are so closely in sympathy with the opinions expressed by this journal when the subject was under discussion last winter that they sound like extracts from its columns. The truth is, the Cullom bill is as dead as a smelt, and no one conversant with the facts believes that it will be seriously considered at this or any other session of Congress. The leaders in the movement to revive this collapsed measure are either fooling themselves or for purposes of their own are trying to galvanize the deceased into a semblance of life. If sufficient funds can be raised to maintain a pretentious 'bureau' in Washington this winter and provide occupation of a congenial and semi-public nature for a 'Washington manager' the exploitation of the Cullom bill will not have been in vain. If millers are foolish enough to contribute to this fund they will do violence to their good sense. Doubtless there are abuses in the transportation business, and discrimination in rates is one of them, but the passage of the Cullom bill is no way to remedy them. If by any possibility the measure should show signs of passing, the real shippers themselves, as Mr. Simmons truly says, will come together and kill it."

THE NEW SOUTH.

Its Inevitable Future Attracting Investors.

[Drugs, Oils and Paints.]

Judicious manufacturers and capitalists in all parts of the country are more and more persistently fixing their attention upon the South as a field of opportunity. Go where one will, North or South, the renaissance of Dixie is in the air. In the South we catch the note of expectation and resolve in the speeches of the punctilious representatives of the old regime, no less than in the confident exuberant swagger of the young men. In the North, amid the deprecation of certain forms of lawlessness and barbarism, we catch the saving "nevertheless" of the investor and the promoter.

And what could be more rational or more inevitable than this crudescence? The South as a whole is today the least developed part of our country, and yet taking it all in all, mountain and valley, shore and upland, it is in soil the most fertile and in resources the richest of the entire domain over which float the Stars and Stripes. Agriculturally, it has been to the rest of America what Egypt is to Europe. When the agricultural lands of the South are farmed as are the fields of middle Europe or even of our own Northwest, they will surprise the world with their fertility. When the mineral resources of the South are exploited and utilized as are the mineral resources of Pennsylvania or even of the Michigan peninsula, they will make Continental Europe look once more to its tariffs. When its forests are scientifically worked as are the Silesian woodlands or even as the forests of Wisconsin, they will silence the devastating scream of the saw in many regions now crying for rest and regeneration. And when the furnace is brought to her mines and the mills to her fields, New England and Pennsylvania will comprehend something of the latter-day sentiments of British manufacturers.

And all this is in the air—the agricultural machine and the agricultural experiment station are making their beginnings on Southern soil; the ridges and hollows of the Southern Alleghenies are beginning to reverberate with the roar of dynamite and to re-echo the rattle of the car-wheel; the forests of the Southeastern plantations are beginning to quake with the crash of falling timber and prolong the scream of the saw-mill; the glow of the blast furnace and the clatter of the rolling mill are beginning to waken the echoes at the shaft's mouth, and, more significant than all, the whirl of the spindle and the rumble of the loom is beginning—no, not beginning, but already established at the very gateway of a thousand cotton fields.

The building of cotton mills in the South practically began during the last quarter of the century. Today there are in the cotton-growing States nearly a thousand mills, consuming about 15 per cent. of the total crop, and new plants are being erected at the rate of nearly 200 yearly.

This development of the cotton-manufacturing industry, while the most striking, is merely typical of other developments which are manifesting themselves throughout the late Confederacy. It is as natural and as inevitable as the scouring of its bed by a mountain torrent and the deposition of the silt on the bar at the river's mouth. The working of the laws of social economy render it fatally sure that the manufacturing plant will finally find its logical situation at the point representing the factor of greatest economy when the average is struck between the cost of production and freight charges.

Nothing but wilful adherence to feudal conditions long after the rest of the civilized world had outgrown them prevented the South from taking the lead in certain lines of manufacture early in the century.

The civil war, which abolished this anomalous condition, sounded the trumpet for a new South. It announced the march of the cotton mill to the cotton field, and the disinterested observer can see in the gradual drifting of the industry from New England's watercourses to Southern villages a sort of poetic manifestation of the moral law of compensation. It was New England above all—let the South thank and celebrate her for that—which determined that feudalism should cease in the South. Now New England laments the remote consequences of her acts as she hears afar the whir of Southern spindles and notes perforce the decreasing hum at her own doors. But there is no cause for regret; it is to the advantage of all that all labor shall be effective in this world. There is nothing gained by hauling material back and forth aimlessly across the earth. As it was originally natural that New England should gradually take from Old England the manufacture of Southern-grown cotton, so it is now natural that the mill shall approach still more closely to the field.

Development and diversification of industries mean growth in population, elevation of the mass average in civilization and the expansion and diversification of needs that accompany advancing civilization and means. In other words, the increase of Southern industries means increase of Southern wants, and in this latter increase the whole country is interested.

The South is beginning to feel the need of everything that goes to the enhancement of happiness and the increase of comfort, including paints, oils, drugs and all other commodities. Therefore, in closing, we bid our readers look to the South, for in it is the opportunity of the immediate future.

INDUSTRIES IN MEXICO.

Work Being Pushed on the Monterey Steel Rolling Mill.

[Special Cor. Manufacturers' Record.]
Monterey, N. L., Mexico, December 1.

The Monterey Steel Rolling Mill Co. is pushing the construction of its works as fast as men and money can do it. Your correspondent, in an interview with Senor Constantino at the Milmo Bank, who is the treasurer of the steel mill, was informed that they would finish this week the foundation for all the buildings; the ground (500 acres) was all cleared and leveled, all the railroad tracks in the yard were graded and ready for the rails, so as to make connection with the four railroads that enter the city. Some of the machinery that they purchased in Cincinnati, Cleveland, Shenectady, New York and Pittsburg is now on the way, and may reach here by the middle of the month. Mr. William White, chief engineer and superintendent, was to leave Pittsburg, Pa., Wednesday night, and is due to arrive Saturday night. When he comes he will examine the work that has been done to see that everything is in proper shape for the reception of the machinery when it comes. He informed me that they placed an order that day with Col. J. A. Robertson of Monterey for 3,500,000 of his dry-pressed brick to be delivered at once. They will require about 10,000,000 of these bricks. They also placed large orders with local dealers for lumber.

After the first of January they will commence to build railroads from the

Mexican National Railroad to their iron and coal fields in the State of Coahuila. They have made traffic arrangements with the National people to haul the iron and coal for them. They are now having suitable cars made for that purpose. The National people may build the roads and operate them.

Mr. Eugene Kelly, banker, of New York, the son-in-law of the late Patricio Milmo of this city, and who is the largest stockholder, spent a few days here looking over the works, and left Tuesday night for New York, and from there he goes to London.

Next week Col. J. A. Robertson will install an additional press to his brick plant, so as to be able to supply the demand for brick. There are a number of new buildings now at a standstill for want of brick.

The proprietors of the Iturbide and Zaragoza hotels are going to put electric pumps into their wells in the Patocies, so as to supply the hotels with well water. They are at present operated by windmills. A number of the small factories are going to run their machinery by electricity.

The woolen mill that is being erected at Linares, of which I made mention in previous letters, is making rapid progress towards completion. The most of the machinery for it has been received. It was purchased in the United States at a cost of over \$80,000.

The Mexican International Railroad Co. will in January next extend the Cuatro Ciénegas branch to the mining town of Sierra Mojada. They are now receiving considerable construction material for it.

Mr. Newton R. Wilson, manager of the Tarcon smelter, left a few days ago for the States to purchase machinery for the plant.
EDMOND LEVAN.

WROUGHT BY PROSPERITY.

Changes Enjoyed by the Farmers of Texas.

In a letter to the Manufacturers' Record Mr. John Howard of Houston, Texas, writes:

"It is said that comparisons are odious, but we cannot resist the temptation of comparing the condition of business affairs in Texas today outside of the storm-stricken district with that of two years ago, and for several years previous to that time, during the time of 35-cent and 40-cent wheat and four-cent and five-cent cotton, with other products in proportion.

"In traveling over the State and visiting the different villages, towns and cities we find that the farmers are paying up their old bills, buying new wagons and buggies, harness, lumber, wire, cooking and heating stoves, dry goods, etc., and paying cash for same; and, in turn, the business and professional men are painting and repairing their houses and fences; many of them building new residences; in short, prosperity is in the land, and it seems hardly possible that the Texas of today is the Texas of a few years ago.

"What has brought about this great change for the better? Is it not on account of the tillers of the soil receiving fair prices for their products? When we had four-cent cotton and 40-cent wheat everybody from the farmer to the banker was sour and cross, and had the 'blues'; everything was run down at the heel; lands, town and city property decreased in value fully 50 per cent., and dull sale at that—all of which goes to show that if the farming classes are fairly prosperous the balance of us will be in the same condition.

"This ought to be an object-lesson to us, and we should profit by it. We have

indisputable evidence that one does not have to grow wheat, cotton, rice, sugar, fruit or vegetables to be interested in these things and to profit by those who do grow them, being well paid for their labor. It will not do for the business and professional men to say in the future, as many of them have in the past: 'It's none of my business what the farmers are getting for their products; it's none of my funeral; let every tub stand on its own bottom,' and like talk. We believe it is possible, by a united effort on the part of all who are interested (which, of course, includes professional men, business men, railroad men and the property-owners in the towns, cities and country) to secure fair prices for the products of the farm in Texas. Cotton, especially, is not a perishable commodity, and it can be held and dealt out to the manufacturers about as well as lumber, wagons and machinery of all kinds are to the people, just as the spinners want it. Did the lumber men and those manufacturing wagons, farming implements, cotton goods, etc., dump their products onto the market in from two to three months, as the cotton producers have in the past, what would they receive for their products?

"While we are enjoying our present prosperity it might be well in passing not to forget our experience in the past few years and try to profit by it."

Oil in Kentucky.

[Special Cor. Manufacturers' Record.]
Somerset, Ky., December 8.

The oil development in Wayne county, Kentucky, and Fentress county, Tennessee, oil fields is progressing at a rapid rate. Several companies have been formed here within the last few weeks for the purpose of drilling wells. The Standard Oil Co., which recently purchased the Kentucky Oil & Pipe Line, is making a survey to extend the line in Tennessee, and is buying oil along the line of the Southern Pipe Line and shipping it to Somerset. There is a fine prospect for an oil refinery at this place within a very short time. The C. N. O. & T. P. Ry. Co. is building a large freight-house at this place and making extensive improvements. Timber and stave dealers are getting out large quantities of lumber and staves, and business in these lines is getting better and a large amount is expected after the first of the year. Several oil and timber properties will be developed in the southern part of this county within a very short time by Eastern capitalists. The Commercial Club of this city has recently received several inquiries from parties wishing to erect box factories and a number of other factories at this place. The railroad company is offering inducements, and with an abundance of timber it is expected that several factories will locate in Somerset within the immediate future.

J. P. HORNADAY.

The Pig-Iron Market.

Matthew Addy & Co. write of the iron market as follows:

"The difficulty of getting iron forward fast enough on rush orders still continues, and this is the only annoying feature of the pig-iron situation at present; otherwise, everything is in excellent shape. Demand is somewhat less than previously, but this is only comparatively, for sales are being made in fair volume. Prices are firm, with no sign of weakness in any direction. The tone of the market is healthy, and business today is being done along wholly legitimate and conservative lines. There is, as far as we can see, no speculative buying at all. Purchases are being made to cover actual requirements, and, as a rule, the deliv-

eries specified do not cover more than three or four months ahead; in fact, the pig-iron bought represents exactly the actual business done by consumers. It has been a long time since we have had a situation just like the present, but one thing is sure, and that is, that for a long time ahead a regular and steady market is assured."

The Iron and Metal Trades.

[Special to Manufacturers' Record.]
New York, N. Y., December 12.

In its review of the week the Iron Age says:

"Our monthly blast-furnace statistics show that for the first time since June 1 there has been an increase in the production of pig-iron, the capacity of the coke furnaces at work on December 1 being 227,067 tons weekly, as compared with 207,381 tons on November 1 and 288,771 tons on June 1. Coke-iron stocks have declined 80,250 tons during November, so that the statistical position has grown much sounder during November.

"Some contracts for next year's supply of coke have already been closed, but since they are at delivered prices it is impossible to judge closely what the figure at oven was. It is understood that the producers of the Connellsville region are holding for \$1.80, while in the Pocahontas district \$1.65 was done some time since. The price is now \$1.75. The demand for coal is now so heavy in this district that the collieries are indifferent as to the coke business. In the New River district the asking price is \$2.50.

"It is understood that the ore interests of Lake Superior are to meet toward the end of January, so that probably nothing will be done until then.

"Good news to makers of pig-iron comes from one branch, whose requirements have been very light this year, and that is the cast-iron-pipe industry. Authorities in the trade report that not for many years has the demand for large pipe, 24-inch to 60-inch, been so large so early in the season as now. New York and Brooklyn led off with 30,000 tons some time since. This week the Boston water board received bids for about 5250 tons, and the sewerage board of the same city is in the market for 7500 tons. While the prospects for tonnage are good, there is, however, a very sharp struggle for supremacy going on between the consolidation and the outside interests, and very low prices are being made.

"The billet trade is very quiet, and while the export shipments on old orders continue very large, very little new business is being taken. As a matter of fact, that is true of the whole line of iron and steel products, with the possible exception of rails and of structural material. The European makers are thoroughly aroused, while the buyers show great timidity, in view of the sharp decline which has taken place. In some few cases exporters did, when placing orders, secure the option to sell in this country, and some tonnage is thus being resold here, but it is not important in any branch.

"The general outlook does not encourage the belief that the export movement will be as heavy as it is now, unless very considerable sacrifices are made. The large interests avow that what is absolutely necessary in this direction will be done to keep a footing.

"In the rail trade further large sales have been made, the most notable, of 80,000 tons for the Vanderbilt lines, being distributed among four mills. The report that the Norwegian railroads had given an order for about 12,000 tons to Eastern manufacturers is confirmed.

"No specially noteworthy transactions

have taken place in structural material, but good inquiries continue to come forward, and the outlook is excellent.

"The plate makers have made a further advance of \$1 per ton, while the leading sheet interest has established the price of 2.80 cents, Pittsburg, for No. 27 black sheets and 75 per cent. discount for galvanized sheets.

"The makers of bars report continued activity from all sources, the requirements for car building being still heavy. The report of a larger cotton crop than expected is favorable to the cotton-tie branch, which has been rather languishing."

Iron-Making in South Carolina.

We have received from Mr. John S. Norwood of Dresden, Abbeville county, South Carolina, a sample of very fine magnetic iron ore, of which he says there is an abundant supply in that county. Col. J. C. Black of Blacksburg, Cherokee county, South Carolina, has furnished during the past year or two considerable quantities of the same kind of ore to the Cherokee furnace of the Empire Steel & Iron Co. at Greensboro, N. C. The existence in South Carolina of iron ore of excellent quality has long been known. In our "Iron in All Ages" we gave full details of an active iron industry that existed in that State in the last century and down to 1856, soon after which year the last fire in its various iron enterprises was put out.

In the northwestern part of South Carolina, including the counties of Union, Spartanburg, Cherokee and York, are valuable deposits of magnetic ore, and here the first iron works in the State were erected by Mr. Buffington in 1773, but they were destroyed by the Tories during the Revolution. Soon after the Revolution both furnaces and forges were built in York county, and about 1815 there was a sheet mill in this county; also a nail factory. In 1802 an air furnace was erected on a neck of land between Cooper and Ashley rivers, where good castings are said to have been made. Tench Cox enumerates two bloomeries in Spartanburg county in 1810, four in Pendleton county, two in Greenville county and one in York county—nine in all. He also mentions one small nailery and one small steel furnace in the State. He makes no reference to blast furnaces. In the census year 1840 there were four blast furnaces in South Carolina and nine bloomeries, forges and rolling mills. In 1856 South Carolina had eight furnaces—one in York, one in Union and six in Spartanburg county. They are described by Lesley. Four of these furnaces were then in operation, but the other four had been virtually abandoned. In 1856 there were also three rolling mills in the State—one in York, one in Union and one in Spartanburg county, all of which were active in that year.

Owing to the entire absence of mineral fuel, it is perhaps too much to hope that South Carolina will soon see a revival of the manufacture of iron within its borders, but it is not at all improbable that in the near future its valuable deposits of iron ore will be mined and shipped on a large scale. Better railroad facilities than now exist would hasten this end.—Bulletin Iron and Steel Association.

A Dangerous Measure.

In a second communication to the Globe-Democrat Mr. E. C. Simmons of St. Louis, opposing the Cullom bill, writes:

"I am quite sorry that there was not an opportunity to discuss this question before the meeting which was held here recently, but that evidently was not the

purpose of the meeting, and clearly shown by the fact that not only myself, but others who were opposed to this Cullom bill were not wanted, or not permitted to speak on the subject.

"Beyond all this, in my judgment, the bill will never cure the troubles that now exist in regard to these matters, because if we are suffering from anything it is not the rates, the rates as a whole being abnormally low as compared with freight rates in other countries, and I cannot see how, even if this tremendous and dangerous power was given to the commission to make rates, it would in any way serve the purposes which it is claimed by the advocates of the Cullom bill will be obtained, viz., to stop discrimination or stop rate-cutting. The making of rates is one thing, and the cutting of rates an entirely distinct and separate thing.

"Therefore, I must differ with this courteous gentleman, the chairman of this committee, in saying that it is a wise and judicious bill, for, on the contrary, I believe it is one of the most dangerous bills that has ever been put before Congress."

OUTLOOK FOR COTTON.

Observations Abroad of Gen. W. W. Gordon of Savannah.

Gen. W. W. Gordon of Savannah, who has spent some months in Europe, is convinced that in spite of the temporary stoppage of a demand for cotton goods in China, present prices for cotton will be maintained and Southern planters and manufacturers and Southern people generally continue moving toward prosperity. In an interview with the Savannah News General Gordon said:

"This is a bull year, and there are many reasons why it should be. There is more money in circulation, in the first place. The permission given to the national banks to increase their circulation by 10 per cent. is being largely availed of, and in addition to this the provision for establishing national banks with capital of not less than \$25,000 means a further increase in circulation. I have not the figures by me, but I think the latest statement shows the amount of national bank currency in circulation to be something like \$660,000,000. This is more money of this kind than we have ever had before. Commercial and industrial lines in the North are in a very flourishing condition. The farmers of the West, with their large grain crops and good prices, have paid off their mortgage indebtedness and are piling up their money in the banks. Money is cheaper today in Chicago, St. Louis and Omaha than it is in New York.

"Now, all this money must find some form of investment, and a great deal of it is coming South. A great deal has already come here. I myself know of instances where millions of Northern capital have been invested in Southern mines and cotton mills, and I believe that much more will be invested in the same lines.

"Here is the point I am coming to. The Southern cotton mills have been the salvation of the cotton planters of the South Atlantic States. Should there be another period of depression with cotton at five cents and below it will be nothing but the cotton mill at his door, to which he can dispose of his cotton and save transportation charges, and the price which he will get for his cottonseed, that will keep the planters in the Atlantic coast States from being wiped out of business. The Southern mills are destined to be the backbone of the cotton industry in these States, and I hope to see the day when every pound of cotton grown in these States is manufactured by our own mills."

General Gordon added that while abroad he was struck with the immense advantage of America over old rivals in immense supplies of coal, iron, agricultural products and raw material of every description, and its superiority in labor-saving machinery, which is likely to increase.

The cornerstone of the administration building of the Charleston Interstate and West Indian Exposition was laid on Wednesday with imposing ceremonies in the presence of many visitors from different parts of the country.

FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

DEVELOPING SHIPBUILDING.

Views of a Prominent Steamship Company Director on the Subject.

As readers of the Manufacturers' Record are aware, the Maryland Steel Co. has a contract for three steamships having a carrying capacity ranging from 5500 to 11,000 tons each, which will be operated by the Boston Steamship Co. of Boston, Mass. The Boston organization now has two vessels in service, which were also built at Sparrow's Point.

Mr. Alfred Winsor, one of the directors of the Boston Steamship Co., has taken a deep interest in the question of again establishing an American merchant marine, and in American shipbuilding. In a letter to the Manufacturers' Record on the prospects of this industry he writes as follows:

"While I am building and have built a good many steamships, I do not feel as if I knew much about the ship-yard question. I have not much doubt that should the shipping bill now before Congress pass there will be plenty of work for our ship-yards for several years ahead, and also for others which will undoubtedly be built. I think anyone who is conversant or will look into the shipping interests of this country will be heartily in accord with the proposed legislation; in fact, I consider it is absolutely necessary to have some assistance from the government to start once more this great industry, viz., owning and building ships in this country."

For Savannah's Harbor.

By act of Congress provision has been made for a preliminary examination of Savannah harbor with a view to the further consideration of the plan of deepening the harbor to twenty-eight feet at mean high water. The commercial organizations, transportation companies and individual business men are working hard to have the improvement accomplished, and Mayor Herman Myers of the city has prepared a comprehensive pamphlet setting forth their reasons why it should be made. He shows in an introduction that during the past twenty years as a direct result of an increase of the channel from nineteen feet to twenty-six feet, the value of the city's commerce has increased from \$70,000,000 to \$125,000,000, and the total tonnage of vessels clearing at the custom-house from 1,242,484 to 2,115,318. He adds that "those most competent from experience and observation to express an opinion are of a decided belief that a deepening of the channel to twenty-eight feet will result immediately in the movement to and from Savannah of vessels of greater draught and tonnage than heretofore, giving increased facilities for transportation at a smaller cost, benefiting the producers of exportable commodities throughout a vast section of the South and West, rendering tributary to Savannah as an outlet the foreign and domestic markets by the railroad systems having their terminals here and the superior position of this port in relation to such territory."

Exports to the Asiatic Market.

Mr. M. L. Campbell, traffic manager of the Oregon Railroad & Navigation Co., has recently been in New Orleans in the interest of the cotton export trade by the way of the Pacific coast. Mr. Campbell states that his company has considerably

increased its facilities recently, and in an interview is thus quoted:

"Heretofore the most of our cargoes have consisted of flour, but we have larger ships and have increased our facilities for handling other products, and are looking specially to the South for the immense trade we see possible in cotton. Our two new ships are the Indrapura and the Indravelli, while we are negotiating for a third. These ships carry 7500 tons deadweight. The rate of cotton from inland points in the United States to China runs at about an average of \$1.35 per hundred, and we will send the commodity we get from New Orleans and the Southern States direct to Kobe, Nagasaki and Yokohama in Japan, and to Hong Kong, Shanghai and Port Arthur in China, and from these ports by coastwise steamers to the smaller ports. We will ship also via these ports to the Philippines, though there has been nothing done as yet as to direct connection with Manila by our line from Portland."

Lake Steamers for Ocean Traffic.

The steamer Thompson has been chartered to carry coal from Norfolk to the New England market. The Thompson is of the whaleback model, and was constructed at Cleveland, Ohio. It is understood that a number of steamers of this class will be placed in service between Hampton Roads and Northern ports in the coal trade in the near future.

The steamer Paraguay, also built on the Great Lakes, has been chartered for use along the Atlantic coast, and is now carrying coal.

To Advertise New Orleans.

The Manufacturers' Association of New Orleans is considering the plan of chartering a steamer for the purpose of making an exhibit of New Orleans manufactures in the Central American and West Indian markets. A committee of the association, which includes R. McWilliams and J. W. C. Wright, are in charge of the project. It is expected to make a trip of about thirty days, touching at all of the principal ports of the countries referred to.

New Line to Mexico.

A dispatch from Portsmouth, Va., is to the effect that a steamship line may be started in the near future between Pin-rer's Point and Tampico, Mexico. It is calculated to carry general cargo outward and bring sulphur to the factory of the Virginia-Carolina Chemical Co. of Pin-rer's Point. It is stated that the Virginia-Carolina Company has recently secured extensive sulphur deposits in Mexico, which are to be worked on a large scale.

Roundlap-Bale Exports.

The American Cotton Co. during November shipped to Europe 70,347 roundlap bales, bringing the total of its foreign shipments since October 1 up to 179,630 bales.

Notes.

Recent figures indicate the steadily-growing bulk of commerce from Galveston. On December 5 nearly 70,000 bales of cotton, valued at \$3,600,000, were shipped from the wharves, in addition to a quantity of grain, ore and other merchandise.

The steamship Lord Erne, recently completed at Glasgow, Scotland, has reached Baltimore on her first trip. The Lord Erne will carry 7000 tons of cargo, and is 375 feet long and 50 feet beam. She will be placed in service in the Lord Line between Baltimore, Belfast and Dublin.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

400 MILES OF LINE.

Chicago, Rock Island & Pacific Plans an Important Extension.

One of the most important railway projects ever undertaken in the Southwest will probably soon be commenced by the Chicago, Rock Island & Texas division of the Chicago, Rock Island & Pacific Railway Co. At present this system extends southerly to Fort Worth, Texas, and in a southwestern direction to Liberal, Kans. As readers of the Manufacturers' Record are aware, the El Paso & Northeastern Railroad Co. has recently been completed from El Paso, Texas, to White Oaks, N. M. The Rock Island Company has determined to build an extension from Liberal to White Oaks, a distance of nearly 400 miles, and it is officially announced will secure control of the El Paso & Northeastern. With the new mileage it will have almost a direct route from Kansas City to the Mexican border at El Paso, and will form a connection with the Mexican Central, giving it a route to the City of Mexico. The El Paso & Northeastern is about 175 miles long between the towns named. The extension of the Rock Island will be through portions of Kansas, Texas, New Mexico, also Oklahoma Territory. Mr. N. H. Lassiter of Fort Worth, Texas, general attorney for the company, has applied for a charter for the road from Texas under the title of the Chicago, Rock Island & Mexico Railroad Co. The total distance from Kansas City to El Paso will be about 900 miles by the new line.

An Important Project.

At the annual meeting of the Gulf & Brazos Valley Railroad Co. W. A. Squires was elected president and general superintendent; T. R. Anderson and E. E. Churchill, vice-presidents, and T. F. Berner, secretary and treasurer. The Gulf & Brazos Valley is in operation between Peck City and Mineral Wells, Texas, a distance of ten miles, but arrangements have been made to complete about twenty miles of extensions, and the necessary rails have already been secured for this purpose. It was announced at the meeting that a Michigan syndicate has become interested in the project and may advance the necessary capital to extend the road 100 miles from its northern terminus and about 225 miles from its southern terminus, giving it connections with the principal systems now in operation in the Southwest. A committee of the directors has been appointed to consider the proposition made by the Michigan capitalists. It includes W. A. Squires of Henrietta, Texas, and H. W. Peck of Kalamazoo.

Freight on Southern Lines.

Commenting upon the earnings of Southern railroads the Boston Financial Information Co. says: "The Southern roads, particularly Louisville and Southern Railway, are already feeling the good results of the increased price of cotton. Increased prices work favorably for the railroads in two ways. The higher price results from a good demand, which insures the freight of it in instances at increased rates, while the larger price not only allows, but urges the producer to indulge in the luxuries as well as the necessities of life, and the railroad has to carry them to him. Cotton is not the only thing, however, as it used to be, in the

South. The mineral haulage is an almost equally important item, and it is destined to grow largely. And then, in a general way, the South is making greater strides than any other one section of the country, so that one can figure out why the railroads in that section have advanced as they have and must advance more."

Baltimore to Cape May.

It is announced that the Cape May & New Jersey Steamship Co. has made arrangements to purchase the steamer Virginia of the Old Bay Line for use between Cape May and Lewes, Del. The Virginia will run in connection with the Queen Anne's Railroad on what is known as the Baltimore & Cape May route. She is one of the largest of the fleet built for the Baltimore Steam Packet Co., and is excellently equipped for passenger service, while her engines can develop a speed of nearly twenty miles an hour. President William H. Bosley of the Queen Anne's Railroad Co. informs the Manufacturers' Record that arrangements are now being made to let contracts for its extension a distance of twelve miles to Leve Point, on Chesapeake bay, which will be the railroad terminus in future.

An Illinois Central Report.

A report is current that the Illinois Central is negotiating to use a portion of the Southern Missouri & Arkansas Railroad with the view of reaching the Southwest. Several times within the last two years it has been rumored that the Central had made surveys with this end in view. Recently the Central completed an extension to East Cape Girardeau, Ill., which is on the Mississippi river, opposite Cape Girardeau, Mo. A ferry is now in service between the two towns. The Southern Missouri & Arkansas extends from Cape Girardeau to Hunter, Mo., a distance of ninety-two miles, but recently the Manufacturers' Record announced that a company had been formed to build a further extension forty miles in length.

An Important Project.

According to a letter from Jere Baxter of Nashville, Tenn., the principal promoter of the Nashville, Florence & Northern Railroad and president of the company under this title, arrangements are being made with contractors to build the line as soon as negotiations with people in towns along the route for right of way, etc., are completed. Mr. Baxter also states that he has arranged to buy the necessary equipment. As already stated in the Manufacturers' Record, it is to extend from Florence by way of Nashville, Tenn., to a connection with the Illinois Central system at Leitchfield, Ky., a distance of 225 miles. It will be an important feeder of the Illinois Central, giving the Central an entrance to Nashville.

A Pennsylvania Rumor.

A dispatch from Richmond, Va., is to the effect that the Pennsylvania Railroad is negotiating with the Seaboard Air Line to secure the right of way which the latter recently obtained between Richmond and Quantico, Va., with the view of building an extension between these points. The Pennsylvania owns a line as far as Quantico, Va. It is also stated in connection with the report that the Pennsylvania desires to utilize the tracks of the Seaboard from Richmond to Petersburg, Va., where it would connect with the Norfolk & Western system.

Electric Lines Combine.

According to a dispatch from Wheeling, W. Va., arrangements have been made to combine the Wheeling Railway

Co. with the Citizens', the Moundsville, Benwood & Wheeling and the Bellaire, Bridgeport & Martin's Ferry electric lines. The combination will be operated under the name of the Wheeling Railway Co., and it is stated that \$2,000,000 in bonds and \$2,500,000 in stock will represent the capitalization. T. H. Conderman of Philadelphia, a large security-holder in the lines, arranged the consolidation.

Earnings Increasing.

President S. M. Prevost of the Baltimore, Chesapeake & Atlantic Railway Co., in his report for the year ending August 31, states that the results have been very gratifying. The net earnings amounted to \$140,000, a gain of nearly \$60,000 within five years. After deducting interest on securities, a balance is left of \$83,000. This company owns the railroad formerly known as the Baltimore & Eastern Shore, also a number of steamboats operating on Chesapeake bay and its tributaries.

Western Maryland Construction.

In a statement to a representative of the Manufacturers' Record President John M. Hood of the Western Maryland Railroad Co. denies the report that this company has been surveying a proposed extension to Pennsylvania coal fields. Mr. Hood states that the only new work upon which the company is engaged is the completing of the line to Altenwald, Pa., which will considerably reduce the grade on this division. It will be finished in a few weeks.

Will Operate It.

It is authoritatively announced that the International & Great Northern Railroad Co. will operate the Calvert, Waco & Brazos Valley Railroad, now being constructed between Houston and Fort Worth, Texas. It is stated that the International & Great Northern will purchase a majority of the securities in the line. The new road will be about 225 miles in length when completed, and be one of the most important in the Southwest.

Rails and Rolling Stock.

The St. Louis Southwestern Railroad has given an order to the Pittsburg Locomotive Works for ten freight locomotives, also five passenger locomotives, which are to be built as soon as possible. With this order the Southwestern Company has contracted for thirty-one locomotives recently. It is also stated that the company has made a contract with the Carnegie Steel Co. for 10,000 tons of 75-pound rails.

Fast Time on a New Line.

The first train over the new line built by the Southern in South Carolina made the run of fifty miles in fifty-eight minutes, or nearly sixty miles an hour. This is an indication of the quality of the road-bed and the manner in which the track was laid. Upon the line which the Southern completed in the same State last year the first through train averaged over fifty miles an hour.

Railroad Notes.

The Chesapeake & Ohio Railway Co. has given another order to the Richmond Locomotive Works for twenty-five freight engines of the consolidated type. They will weigh, with tenders, about 144 tons each.

In a letter to the Manufacturers' Record Mr. David Sloan, chief engineer of the Illinois Central, writes that no definite arrangements about building the line

between Baton Rouge, La., and Nicholson, Miss., have been made as yet. This road is entitled the Louisiana, Mississippi & Alabama Railroad, and will be about 100 miles long if constructed.

To Improve the Mississippi Delta.

The congressional committee on rivers and harbors has under consideration the improvements at the mouth of the Mississippi river, and, according to a Washington dispatch, will probably commend an appropriation of \$6,000,000 for the Southwest pass. It is stated that the committee is much impressed with the importance of the commerce by way of the Mississippi river, the volume of imports and exports last year aggregating about \$102,000,000. Two plans for improvement are under consideration—one the building of a series of parallel jetties, and the other the building of a single jetty in a curve, which will increase the power of the river currents in deepening the channel. The latter plan was conceived by Prof. L. M. Haupt of Philadelphia.

The National Realty and Loan Society.

The Bulletin of the National Realty and Loan Society explains the objects of this organization as follows:

"The National Realty and Loan Society is an organization of reputable mortgage loan and real estate agents, investors and attorneys to elevate the standard and improve the conditions of the real estate and loan business; to foster among its members a feeling of fraternity and mutual confidence; to secure a closer relation between the investor and loan or real estate agent, and to establish a bureau of information for the benefit of its members.

"The general benefits of the society are those always coming from organization and united action in every business and profession. The first meeting showed how much the opportunity for coming together was valued by the best men in the business, and, without a preliminary programme, the discussion of the interesting papers read was most profitable. Now, with committees to block out the work, and with a better acquaintance between officers and members, much important and valuable work is done at the meetings and all through the year.

"The practical, direct benefits to members of the society are to bring their qualifications for their business, whether as real estate or loan agents, attorneys, examiners or appraisers, directly before investors by means of the printed matter of the society, particularly its plan for 'certified loans,' and by personal solicitation. The society already has a large list of investors, which is increasing daily, and brings the opportunities it has to offer directly before them. By means of the bureau of information names of reliable agents in any part of the country are furnished to members and investors, thus facilitating the exchange and sale of property at a distance and increasing the opportunities for profit. Agents or individuals with lands for sale or exchange can, by listing them with the society, find opportunities among agents in other localities and among investors that no other medium offers. From the nature of the organization no speculative propositions can be considered." Mr. E. K. Sumerwell, 52 Broadway, New York, the general counsel, can give any information desired.

The semi-annual entrance examinations of the National Conservatory of Music of America, No. 128 East Seventeenth street, New York city, of which Mrs. Jeannette M. Thurber is president, will be held on December 26, 27 and 28.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

LABOR IN COTTON MILLS.

Mr. D. A. Tompkins' Practical View of the Situation.

As has been noted by the Manufacturers' Record, Mr. D. A. Tompkins of Charlotte, N. C., has formulated a basis for a law regulating the labor in textile mills. Condensed, the draft of the bill is as follows:

1. Sixty-six hours shall constitute a week's work in textile mills employing ten or more operatives, though by special contract males more than fifteen years old may be employed overtime at extra pay. Time lost by accident not exceeding five hours in a week may be made up inside of two weeks, and time lost by shut-down at the request of the operatives may be made up in the following week.

2. Employees shall give two weeks' notice in writing before quitting a place, and anyone who shall quit without such notice shall not be employed in any other textile establishment within a year.

3. No child under ten years of age shall be employed in a textile establishment. No child under twelve shall be employed in August or during the term of an available school, while all children from eight to twelve, members of whose families work with the mill, shall be required to attend an available school during a school term.

4. Any parent putting all of his children or any of them in a mill and living on the proceeds of their labor without working himself or with less labor than is adequate to his own support, shall be punished as a vagrant, and for one year after his conviction the earnings of the children may be paid to the mother, or if she be not living, to the children themselves.

5. A factory inspector shall be appointed to enforce the law.

In explaining the measure Mr. Tompkins said to a reporter of the Charlotte Observer:

"Section 1—as to hours of labor—explains itself.

"Section 2—As to quit notice. The purpose of this is twofold.

"(1). To improve the moral, educational and social condition of people who work in cotton mills and who live in cotton-mill villages.

"(2). To improve the efficiency of the operatives in the mill.

"All preachers and teachers concur in stating that the great difficulty they have to deal with is the disposition of mill families to move from one mill to another. This is partly due to impatience in little matters that a few days' consideration would remove, and partly to influence of bosses and superintendents, who go out and persuade families to move. A time notice would be greatly to the advantage of the operative and the mill. In the interim the operative could have advantage of counsel and advice from preacher, teacher and personal friends, whereas now some of them are persuaded by runners to load their furniture and move in the night without opportunity to think even over night about the move.

"Section 3—As to child labor. The exclu-

sion of children from a factory should be coupled with compulsory attendance at school. One of the easiest faults to fall into is for people to couple a sympathy for children, especially children of mill operatives, with some prejudice against the mill.

"In truth, it is much better to have the children of a mill village in the mill under the charge of the superintendent and bosses than to leave them in the streets to grow up wild and perhaps disolute. The superintendents and bosses are selected for being the most intelligent, judicial-minded and industrious of all the people in a mill village. The work of the children is always very light. While it would be far better to have the children in school rather than in a cotton mill, it would be better to have them in the mill rather than turned outside.

"To enforce attendance at school it would seem necessary to punish the parent for wilful neglect in the matter.

"Section 4—As to indolent parents. There could hardly be two opinions on this subject.

"Any law relating to cotton-mill labor should be directed at the improvement of the condition of humanity. To do this the punishment for faults should be exactly and impartially where it belongs. If child labor is forbidden by law, then both the factory and parent should be punished if the law is violated. In such cases it is the parent, and not the factory, that is most to blame. Even without a law the factory would prefer not to employ children of tender age. The parent forces it by threatening to move the older members of the family.

"When a man wants to work his children and himself remain idle it is the man alone who ought to be punished. Any labor law should be perfectly impartial in punishing all serious faults. Restrain and punish the factory when at fault, but also restrain and punish the operative when at fault. Those who formulate and pass a law should have in mind only the improvement of the humane conditions, and whatever does this will be to the advantage of the factory.

"The great bulk of mill managers are disposed to do right without any law. The laws are necessary only for the very few who are greedy or would oppress humanity.

"Equally, the great bulk of operatives would do right without any law. It is only the few indolent and vicious who make a law necessary.

"It is the tendency for politicians who are greedy for office to think of such labor laws as would be directed against the mills, thinking thus to please the operative and get the most votes.

"It is also the tendency of many people of sympathetic nature to think that a factory should assume all the responsibilities of life for all the humanity in its village. This is the same sort of sentiment that misleads many a tender-hearted parent to spoil a child.

"Factories should be held strictly accountable by law for fair dealing with all operatives.

"And it would be an exceeding injustice to any human being to attempt to divest him or her of any of the privileges or responsibilities of citizenship.

"Many factories voluntarily support a school or contribute to church funds. These things are no part of the duty of a factory. The operative ought to pay a full share of school tax, and it is better for him that he should be required to do so.

"Section 5—As to inspector. It would be useless to make laws without some way to enforce them. Labor laws are best enforced by a department of inspection."

THE SPINNERS DETERMINED.

Developments Expected as to the Selling of Goods.

[Special Cor. Manufacturers' Record.]
Charlotte, N. C., December 11.

So far as the public knows, the fight between the Southern Yarn Spinners' Association and the Northern commission selling agents is still in status quo, but interesting developments are expected in Charlotte this week. It is understood that a meeting of the board of governors of the Spinners' Association is to be held at the Buford Hotel here on the 13th, at which the report of the special committee will be read. It is reasonably certain that this report will advocate the establishment of selling agencies for the production of the mills represented by the Southern Spinners' Association in Baltimore, Philadelphia, New York and Boston. It is equally certain that the report will be adopted, and that the board of governors has already perfected plans for the establishment of the agencies recommended. It is even said that the men who are to be placed in charge of these agencies have been selected.

The latest report from the commission men was that they had positively declined to meet the demands of the Southern spinners.

The concentration plan of the Southern Cotton Spinners' Association, which demands that a limited number of the commission houses handle the Southern product, and that the commissions be reduced from a 5 per cent. to a 4 per cent. basis, is, of course, the matter at issue.

Dr. McAden, the president of the association, said tonight: "I can tell you nothing. Mum's the word." It is a fact, though, that Messrs. W. C. Heath, R. S. Reinhardt and J. P. Leak, composing the special committee, have been in session here daily for a week past with President McAden, and that they have found means for the establishment of the proposed selling agencies. Enough is known to justify the prediction that the final outcome will be the establishment of the agencies according to the concentration plan. This is certain unless the commission merchants come to the spinners' terms, and that seems to be altogether unlikely.

The Southern spinners have made up their minds in this matter. Unless the Yarn Merchants' Association comes to terms the beginning of the new year will see the concentration plan of the Southern Spinners' Association in operation.

Contracts for \$200,000 Mill

Some months since the Standard Cotton Mills of Cedartown, Ga., was incorporated for the purpose of building an extensive plant. The enterprise has been in abeyance, but it is now announced that contracts are about to be completed for its immediate erection and prompt equipment. Site has been secured, and the construction of both mill buildings and operatives' cottages will be commenced soon. The plant will have 10,000 spindles and cost \$200,000. The officers are: President, M. O. Berry of Columbus, Ga.; secretary-treasurer, A. W. Birkbeck, and manager, William Parker.

\$300,000 Spinning and Knitting Mill.

T. W. Pratt of Huntsville, Ala., informs the Manufacturers' Record that Messrs. W. H. Rowe & Son of New York will build and operate the textile mill which it was announced last week he had arranged for location at Huntsville. The proposed plant will spin and dye yarns and manufacture same into knit underwear, and local reports state that it will cost \$300,000. Charles Shaver, representing the New York firm, is

now in Huntsville to select site for the mill and arrange other necessary details for the early commencement of work on its erection.

The Cotton Movement.

In his report for December 7 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during the ninety-eight days of the present season was 5,260,282 bales, an increase of 363,581 bales over the same period last year. Exports were 2,620,641 bales, an increase of 525,049; takings by Northern spinners 808,930 bales, a decrease of 288,549; by Southern spinners 466,966 bales, a decrease of 17,173 bales.

Ashby Cotton Mills.

A commission for charter has been granted the Ashby Cotton Mills of Marion, S. C., the incorporators being Messrs. J. J. Bradley, W. G. Mullins and W. B. Hummwell, and the capital stock \$100,000. This plant is established, and has been operated until recently as a private enterprise by T. A. Blythe. The incorporated company intends to enlarge and improve the 2800-spindle mill, and for this purpose \$70,000 will be available.

Textile Notes.

The Anniston (Ala.) Carpet Co. is installing several new looms and otherwise improving its carpet mill.

A. G. Jennings of The Glades, Ga., will build a cotton and woolen mill. The product will be principally ventilated quilts and robes.

The Washington (N. C.) Knitting Mill Co. has been incorporated, with capital stock of \$8000, by S. T. Nicholson and others for purposes as indicated by title.

The Broadus Cotton Mill Co. has been organized at Pittsboro, Ala., with capital stock of \$50,000, for the erection of a cotton factory. C. F. Broadus is president.

It is rumored at Anderson, S. C., that Capt. E. A. Smyth of the Pelzer Cotton Mills, Pelzer, S. C., will organize a company to build a large cotton factory in Anderson.

The Harmony Mills of Alice, Ga., recently destroyed by fire, will be rebuilt. The burned plant had 800 spindles and manufactured yarns. Probably the new plant will be larger.

The erection of a 2500-mule-spindle mill for making yarns is contemplated at Warrenton, Ga. B. L. Battle is interested, and is asking for estimates on a plant of the size mentioned.

The J. E. Smith Manufacturing Co. of Thomson, Ga., has awarded contract for additional machinery that will increase its output 50 per cent.; present plant operates 2500 spindles on yarns.

J. M. McBride of Tallapoosa, Ga., confirms the recent announcement of his being interested in the organization of a cotton-mill company, and states that the enterprise will probably materialize soon.

It is rumored that James Henry of Philadelphia has in view the erection of a cotton-spinning mill in the South. He is at present connected with Messrs. Thos. Henry & Sons, operating a 14,000-spindle yarn mill in Philadelphia.

The Kincaid Manufacturing Co. of Griffin, Ga., has increased its capital stock to cover the recent expenditures made in enlarging extensively. The capital is now \$325,000, and the plant has 12,554 spindles and 430 looms.

Messrs. Carey, Bayne & Smith of New York and Baltimore have chartered, with capital stock of \$500,000, to continue the business of the firm in dry goods commis-

sion. Messrs. J. E. Carey and T. Smith of Baltimore, G. H. Bayne of Nutley, N. J.; W. E. Wall of New York and J. G. Gray of Wilmington, Del., are the incorporators.

Another industry connected with the textile trades is announced for Charlotte, N. C. It is to furnish card clothing and kindred supplies for cotton mills, and a large stock will be carried and a complete plant will be used for manufacturing and repairing the class of mill supplies indicated. The plant will be a branch of Jos. Sykes Bros., with W. G. Bigelow as Southern agent.

Mather du Bourg Bringier of New Orleans and Birmingham is interested in the proposed erection of a cotton factory at Donaldsonville, La. A plant of 5000 spindles and 150 looms, which would represent \$100,000 investment, is contemplated. Estimates on a complete plant of the size indicated are invited. Mr. Bringier should be addressed at present at Burnside, La. The erection of a cottonseed-oil mill is also contemplated by Mr. Bringier and associates.

The Washington Woolen Mills at Fredericksburg, Va., have been purchased from the estate of the late Jas. R. Clarke of Baltimore, Md. The new owners are Messrs. John C. Melville and W. H. Duval, who have been for some time conducting the plant as manager and agent, respectively. The mill will continue as the Melville Woolen Mills, running 900 spindles, twenty looms and three sets of cards in the production of cassimeres. Fifty hands are employed.

QUOTATIONS OF COTTON YARNS.

By Buckingham & Paulson, New York, Philadelphia and Chicago, December 10.

| | |
|--------------------------------|---------|
| No. 10s-1 and 12s-1 warps..... | 15 @15½ |
| No. 14s-1 warps..... | 16 @ |
| No. 16s-1 warps..... | 16½ @ |
| No. 20s-1 warps..... | 17 @ |
| No. 22s-1 warps..... | 17½ @ |
| No. 24s-1 warps..... | 18 @ |
| No. 6s to 10s bunch yarn..... | 14½ @15 |
| No. 12s-1..... | 15 @15½ |
| No. 14s-1..... | 16 @ |
| No. 16s-1..... | 16½ @ |
| No. 20s-1..... | 17 @17½ |
| No. 22s-1..... | 17½ @18 |
| No. 24s-1..... | 18½ @ |
| No. 8s-2 ply soft yarn..... | 15 @ |
| No. 10s-2 ply soft yarn..... | 15½ @16 |
| No. 8s-2 ply hard..... | 15 @ |
| No. 10s-2 ply hard..... | 15½ @ |
| No. 12s-2 ply hard..... | 15½ @ |
| No. 14s-2 ply..... | 16 @ |
| No. 16s-2 ply..... | 16½ @17 |
| No. 20s-2 ply..... | 18 @ |
| No. 24s-2 ply..... | 19 @ |
| No. 26s-2 ply..... | 21 @ |
| No. 30s-2 ply yarn..... | 21 @21½ |
| No. 40s-2 ply..... | 29 @ |
| No. 8s-3, 4 and 5 ply..... | 15 @ |
| No. 20s-2 ply chain warps..... | 18 @ |
| No. 24s-2 ply chain warps..... | 20 @ |
| No. 26s-2 ply chain warps..... | 21 @ |
| No. 30s-2 ply chain warps..... | 21½ @ |
| No. 16s-3 ply hard twist..... | 16½ @17 |
| No. 20s-3 ply hard twist..... | 18 @ |
| No. 26s-3 ply hard twist..... | 20 @ |

Cottonseed-Oil Notes.

The cotton-oil-mill season at Jackson, Miss., is drawing to a close. The plant of the Mississippi Cotton Oil Co. will be closed down by the first of January, and the Jackson Cotton Oil Co., known as the Culbertson Mill, will close down about the same time. The Central Cotton Oil Co., known as the Cahn Mill, has seed enough to run about two months.

The market for cottonseed oil at Texas points is quiet, with values easy last week. Prime crude oil is quoted 23½ to 24 cents, and prime summer yellow 26½ to 27 cents; linters, 3½ to 4 cents, all f. o. b. mill at interior points; prime cottonseed cake and meal is quoted \$21 to \$21.50 per ton, and hulls at \$4 per ton delivered at Galveston; cottonseed, prime, is quoted \$11 to \$12 at stations.

The United States fish commission will make a comprehensive survey of the Florida sponge grounds with a view to the development of the sponge industry, which now gives employment to more than 2000 people and a fleet of 200 vessels.

PHOSPHATES.

Florida Phosphates.

[Special Cor. Manufacturers' Record.]
Ocala, Fla., December 10.

Mining and shipping of phosphate from this section has been very quiet for the past few months, and the immediate outlook is not much more promising. A small per cent. only of the mines have been running, and not all of those on a paying basis. Some of the miners whose facilities were better for getting out rock at the minimum cost, and who were fortunate in holding fairly good contracts with the buyer, have gone steadily along and mined their rock and kept their plants running, but have made no great sum of money. The big plants of the Dunnellon company remain closed down, and as it has disposed of all its live-stock and housed the tools and other mining equipment, there seems no immediate prospects of resumption of work. There is some talk of the fine Hassard group of mines at Juliette being gotten into working order again soon, but the affairs of the property are in such a muddle that it does not seem likely to be accomplished for some time to come. Very few new discoveries of rock have been reported during the past three months, and prospecting seems desultory and interest runs light.

Following is a partial list of the mines in the hard-rock section that are being operated, and the list includes the majority of the plants: J. Buttgenbach of Cordeau is operating most or all of his plants in Citrus and Levy counties; he has about six, and has kept most of them running throughout the quiet times. The Camps and the Duttons, in Levy and Alachua counties, are running part of their plants, but are not pushing forward. Edward Holder is mining at Elliston; he has recently leased a mine from M. J. Clements. Hood & Hubbard are running two mines, one at Dunnellon and one at Hartshorn, the old Crown and Crescent, which they recently came into possession of. J. W. Pearson is mining his Alta mine at Hartshorn, and has probably been one of the most successful individual miners in the entire section. He has never shut down, and has never mined at a loss. He gives his work his close personal attention, and profits by the experience of many others. B. J. Potter is running his mine at Morrison, and quite successfully, too. The Suwannee Phosphate Co. at Fort White is taking out a good deal of rock. W. M. Ross is manager of the company, and a very successful man.

Messrs. Ford & Hiller, one of the most extensive mining companies in the State, have been laying low for some time awaiting developments. They are provident miners, smote while the iron was hot, and can afford to await better times. David Woodrowe has opened up mining again for his company, the Holland Phosphate Co. at Fitzgerald; he has a new plant on a good deposit. P. Jumeau, manager of the Laurient mines at Floral City, has recently returned from Paris, and is preparing to start up the mines. George McKay of Ocala has completed the new mine at Hartshorn for the Dunnellon Company and turned same over to it. It will not be operated for some time yet.

It is to be hoped that the beginning of the new century will usher in a new season of activity and prosperity for phosphate men and business. We have the rock, and across the water there is need and a demand for it, but that same water offers the obstacle, and when the "wars are over"—and most of them seem drawing to a close—the miner can get a fair

ocean rate again and will be able to run his plants on full time and replenish his wasted treasury.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., December 12.

In the local phosphate market affairs are quiet, as in other fertilizer ingredients, and the offerings of both Tennessee and South Carolina rock are light. Prices for all desirable grades are about steady. The only charter reported for the week was the schooner Fannie Palmer, 2075 tons, from Port Tampa to Philadelphia with phosphate rock at \$2.25. At all the points of production the situation is quiet, miners only working to supply immediate requirements. The market for South Carolina rock is steady, with a moderate foreign and a slightly better domestic inquiry. In Florida some miners are beginning to make preparations for a larger output, while the smaller plants are doing but little in the way of development. At the ports there is more activity, especially at Port Tampa, while at Fernandina the estimated shipments for December is 11,000 tons, an improvement over that of November. Prices for pebble phosphate are very steady, and for land rock the market is slightly easier. In the Tennessee field there is but little doing in a domestic line, while the foreign inquiry is better, and for the present month shipments from Pensacola are expected to improve. Prices for all grades of rock continue to hold steady, and large miners are generally disposed to hold their rock rather than make concessions in values.

Fertilizer Ingredients.

The market for ammoniates continues to rule quiet, with no urgent inquiry from any quarter. There is considerable demand from Eastern and Southern sections, but generally at concessions from the regular list of values. Holders in the West are firm, with stocks of blood and tankage moderate and offerings light. The following table represents the prices current at this date:

| | |
|----------------------------------|----------------------|
| Sulphate of ammonia (gas)..... | \$2 75 @ 2 80 |
| Nitrate of soda, spot Balto..... | 1 85 @ 1 90 |
| N. York..... | 1 77½ @ 1 80 |
| Blood..... | 2 30 @ 2 35 |
| Azotine (beef)..... | 2 32½ @ 2 35 |
| Azotine (pork)..... | 2 32½ @ 2 35 |
| Tankage (concentrated)..... | 2 20 @ 2 25 |
| Tankage (9 and 20)..... | 2 25 @ 10¢ 2 30 & 10 |
| Tankage (7 and 30)..... | 19 00 @ 20 00 |
| Fish (dry)..... | 25 00 @ 27 00 |

Phosphate and Fertilizer Notes.

The shipments of Tennessee phosphate rock from the port of Pensacola for the month of November amounted to 8361 tons.

The British steamship Aislaby for Antwerp cleared last week from Savannah, Ga., with 1806 tons of high-grade Florida phosphate rock.

The shipments of phosphate rock from the port of Fernandina for the month of November amounted to 3800 tons, and for the ten months ending October 31 to 164,081 tons, making a grand total for eleven months of 167,881 tons. The estimated shipments for December are 11,000 tons.

The Grasselli Chemical Co., whose plant has just been completed at Powderly, near Birmingham, Ala., is making arrangements for the shipment of its products. The plant manufactures heavy acids, and was constructed at a cost of several hundred thousand dollars. It is owned by Cleveland (Ohio) capitalists.

It is stated that the Virginia-Carolina Chemical Co. of Richmond, Va., is to operate a line of steamships between Norfolk and Tampico, Mexico. The company has recently acquired in Mexico a large amount of mining property, some

200,000 acres of which contain rich and extensive deposits of sulphur in quantities that cannot be found at all in this country. These deposits will be worked by the company and the mines developed. The company is now building a railroad from the mines to Tampico, the nearest port. Many improvements are also being made at Pinner's Point at Norfolk.

It is stated that the annual report of the Tennessee Labor Bureau shows that the number of phosphate mines in Tennessee have been doubled within the past twelve months. The statistics at this date so far secured show a total of thirty mines. Assistant Commissioner of Labor Perry says: "While the number of mines had been doubled, the production of phosphate would not show such an increase, on account of the inadequate supply of cars with which to handle the fertilizer rock, the wet weather in the early spring, which rendered surface phosphate mining almost impossible, and the prevalence of smallpox in Maury county and others of the phosphate regions."

The State board of agriculture met last week at Raleigh, N. C. The report of Mr. S. L. Patterson, commissioner of agriculture, dealt principally with the fertilizer question. It shows that during the past year (from December 1, 1899, to December 1, 1900) the sale of fertilizer in North Carolina amounted to 276,238½ tons, or 31,700 tons more than were sold the year previous (December 1, 1898, to December 1, 1899). The receipts to the department from the sale of tags were, however, nearly \$4000 greater in the 1898-99 season. This was due to the fact that in 1898-99 the tax was twenty-five cents a ton, while in the season just closed it was only twenty cents.

The week ending the 6th inst. at Port Tampa was one of unusual activity, five steamers and schooners clearing for various ports with 12,850 tons of phosphate. The following vessels were in port on the 6th inst. loading and awaiting cargoes: Schooner Develin, cargo phosphate for Baltimore from the mines of Joseph Hull; schooner John W. Linnell, cargo phosphate for Philadelphia from the Greenhead Phosphate Co.; schooner Thomas Dennison, cargo phosphate from the Palmetto Phosphate Co. for Baltimore; British steamer Ramleh, cargo phosphate for Marseilles, France, from mines of Joseph Hull; steamer Thomas Melville, cargo phosphate from Land Pebble Phosphate Co. for Helsingborg; schooner Sarah C. Ropes, cargo phosphate for Baltimore from mines of Joseph Hull. The sailings for the week were: Steamship Eureka with 3000 tons of phosphate for North Weymouth, Mass., from Palmetto Phosphate Co.; schooner Merom with 1410 tons for Baltimore from Palmetto Phosphate Co.; steamship City of Everett for Baltimore with 3520 tons from Palmetto Phosphate Co.; steamship Fern for St. Nazaire, France, via Norfolk with 3000 tons, and schooner C. S. Glidden for Boston with 1820 tons.

A dispatch from Newport News, Va., states that the Newport News Shipbuilding & Dry-Dock Co. is likely to get the contract for two of the armored cruisers and perhaps one of the battleships, bids for which were opened last week at Washington.

According to the report of Assistant Commissioner of Labor Perry of Tennessee, the number of phosphate mines in that State has doubled in 1900.

In one day last week the steel mill at Ensley, Ala., with five furnaces in operation averaged one billet every four minutes for six hours.

MECHANICAL.**Modern Lathes.**

A most important product of the machine-tool works is the modern engine and turret lathes. The construction of

necessity of the operator leaving his position in front of his work.

The rack, rack-gear and all small feed-gear are cut from solid steel.

All lathes are fitted up with power cross-feeds.

The range of both lateral and cross

adjust same for the various lengths of different work to be operated upon.

The compound rest is of a new design, and has a long bearing on the cross-slide of the carriage.

All lead screws are cut from a master screw, which assures them being as

Co. of Cincinnati, Ohio. This new machine will plane four sides nine to fourteen inches wide and six inches thick, and has embodied in its construction many new devices and conveniences not heretofore contained in a machine of this description. Among the more noticeable of its mechanical advantages are:

The pressure-bar before the first upper cylinder is adjustable both to and from the cut, and the bar after the cut is adjustable for difference in thickness of material; also the bars before and after the second upper cylinder.

The pressure-bars both before and after the lower cylinder are adjustable vertically and laterally.

A pressure-bar, with independent adjustment, extends over the matching works, and can be thrown out of the way quickly.

The patent weighted matcher-clip, which produces a uniform pressure on the material.

The feed, consisting of six rolls eight inches in diameter, driven by a train of powerful gearing extending through the machine, and the expansion gears on feed rolls are inside the frame.

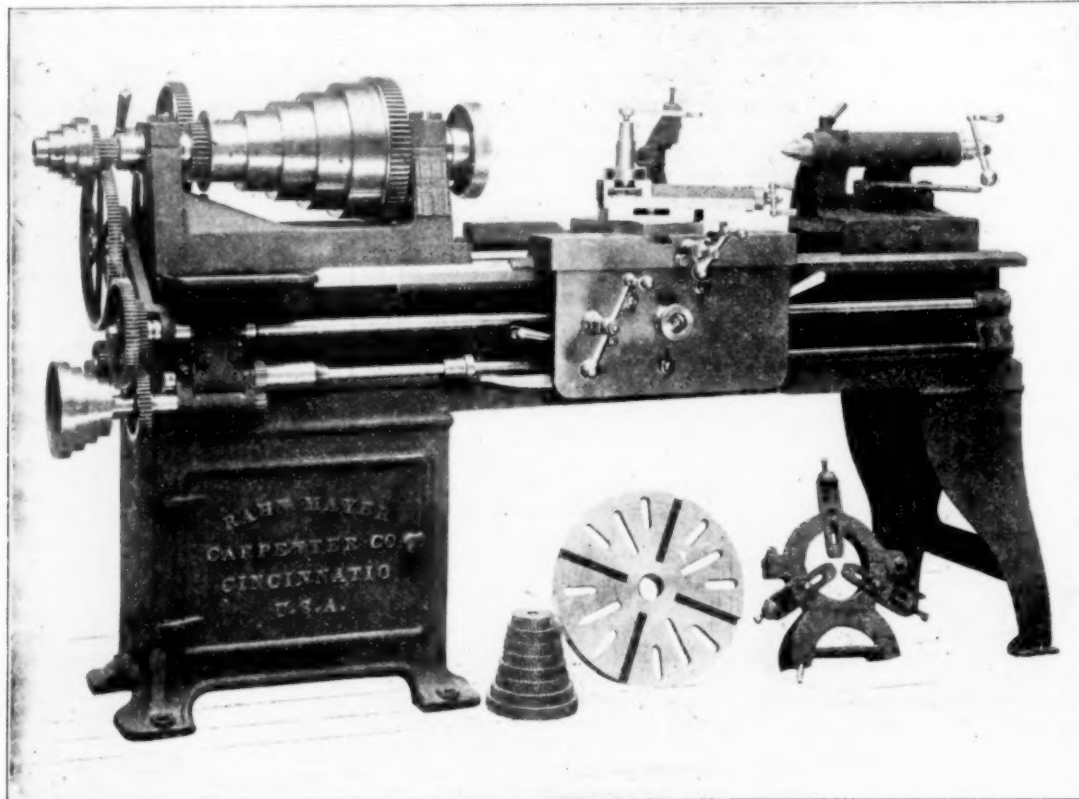
The manufacturer will furnish prices and full particulars of this and other woodworking machinery.

New Fencing Pliers.

One of the handiest of small tools is the plier. An improved fencing plier now being introduced is illustrated herewith. This tool is to be known as the "American Button Plier," and patent on it is now pending. It is made of a good quality of steel, is lighter than the usual plier marketed, and fully warranted by the maker. The Cronk Hanger Co. of Elmira, N. Y., is the manufacturer.

Modern Steam Shovel.

The modern steam shovel is used for handling every known class of material. Like many equipments, the steam shovel has evolved from crude beginnings to the perfect machine as seen today in an extensive and ever-increasing usage. One of the earliest forms of the machine built twenty years ago is today in use, a lasting testimony to the plans and construction of the maker. The important uses of the steam shovel may be named as railroad excavation, cutting down embankments, filling trestles, widening cuts, cutting down heavy grades, handling clay in brick-yards, digging iron ore from the bank, handling ore from the stock-pile to car and boat, and for mining phosphate in the South, one of the most severe tests to which the shovel can be put; also for



18-INCH CABINET BOX LATHE.

these machines requires such complete knowledge and equipment that it is a separate industry. A leading maker in this branch is the Rahn-Mayer-Carpenter Company of Cincinnati, Ohio. Its works are equipped throughout with modern tools and appliances, lighting and sanitary arrangements, and its use of the best materials and the most skilled workmanship has developed a constantly-increasing trade for its engine and turret lathes both at home and abroad. The accompanying illustration represents one type of lathe built by this company. This is the 18-inch cabinet box lathe. As will be seen, the cabinet leg has plenty of metal, is made extra heavy, and can be placed on any of the company's lathes. The machine is designed on lines of generous proportions, being large, roomy, and convenient inside for the placing of tools and appliances that the operator wishes to keep under cover when not in use.

These lathes are designed from new and improved patterns, with special conveniences for quick and easy handling, and nothing but the best material and workmanship are used in their construction.

The spindles are made from high-grade special steel, and are ground perfectly true. The head spindles are hollow, with a 1 5-16-inch hole through their entire length.

Boxes are made from the best phosphor-bronze, and are provided with means for taking up the wear.

Driving cones are of extra large diameter, with provisions for broad belts.

Carriages have long bearings on the ways, with improved devices to prevent their cutting, and can easily be locked for cross-feed work by a bolt and gib on the carriage.

All feeds are adjusted in the apron by a lever convenient to the hand of the operator. This feature does away with complicated gearing and obviates the

feeds is very large, being adapted for very fine feeds on tool steel to very heavy coarse feeds for roughing-off work. Changes from belt feed to positive gear feed can be easily and quickly manipulated.

nearly correct as is possible. Practical mechanics will at once recognize the value of this in the making of screws, taps, etc.

The tailstock is heavy, with a long bearing on the shears, and is provided

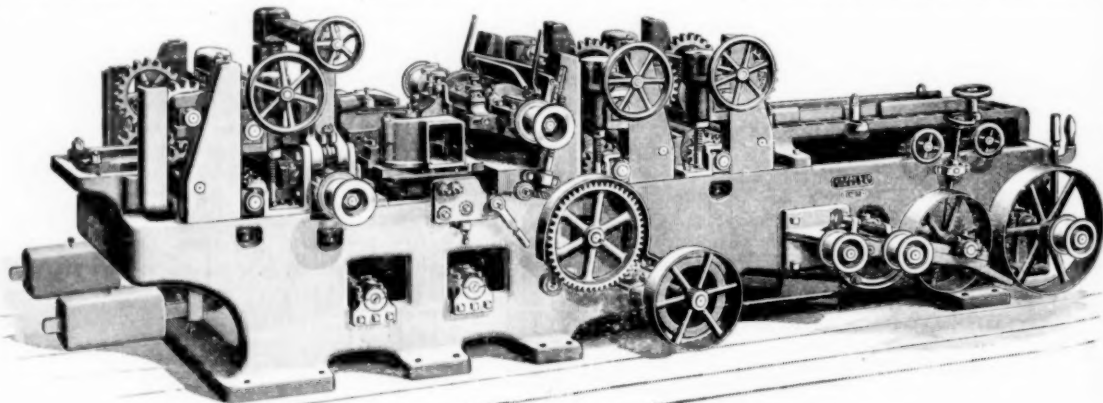


THE AMERICAN BUTTON PLIER.

When desired, these lathes can be furnished with taper attachment, compound rest, rise and fall rest and turret on carriage at a moderate additional cost.

The taper attachment is of an improved design, capable of turning or boring

with set-over for taper work. All lathes are furnished complete, with steady rest, follow rest, full set of screws, cutting gears, large and small face-plates, wrenches, etc.; also are belted and fully tested before shipment.



J. A. FAY & EGAN CO.'S No. 15 "LIGHTNING" FLOORER.

Double-Cylinder Flooring Machine.

Managers of woodworking factories will be interested in the accompanying illustration and description of the "No. 15 Double-Cylinder 'Lightning' Flooring Machine" built by the J. A. Fay & Egan

digging canals, reservoirs, trenches for mains, sewers, foundations for large buildings, for dry gold placer mining in the West, elevating gold bearings from old river beds to a height of thirty feet or more and dumping into a sluice-box for washing.

It would be difficult to enumerate all the uses to which the steam shovel has been and can be put. The thoroughly up-to-date steam shovel may be seen in the accompanying illustration.

This type of steam shovel is in general use today all over the United States. It is mounted on a car constructed entirely of steel, 35 feet long, 10 feet wide, with

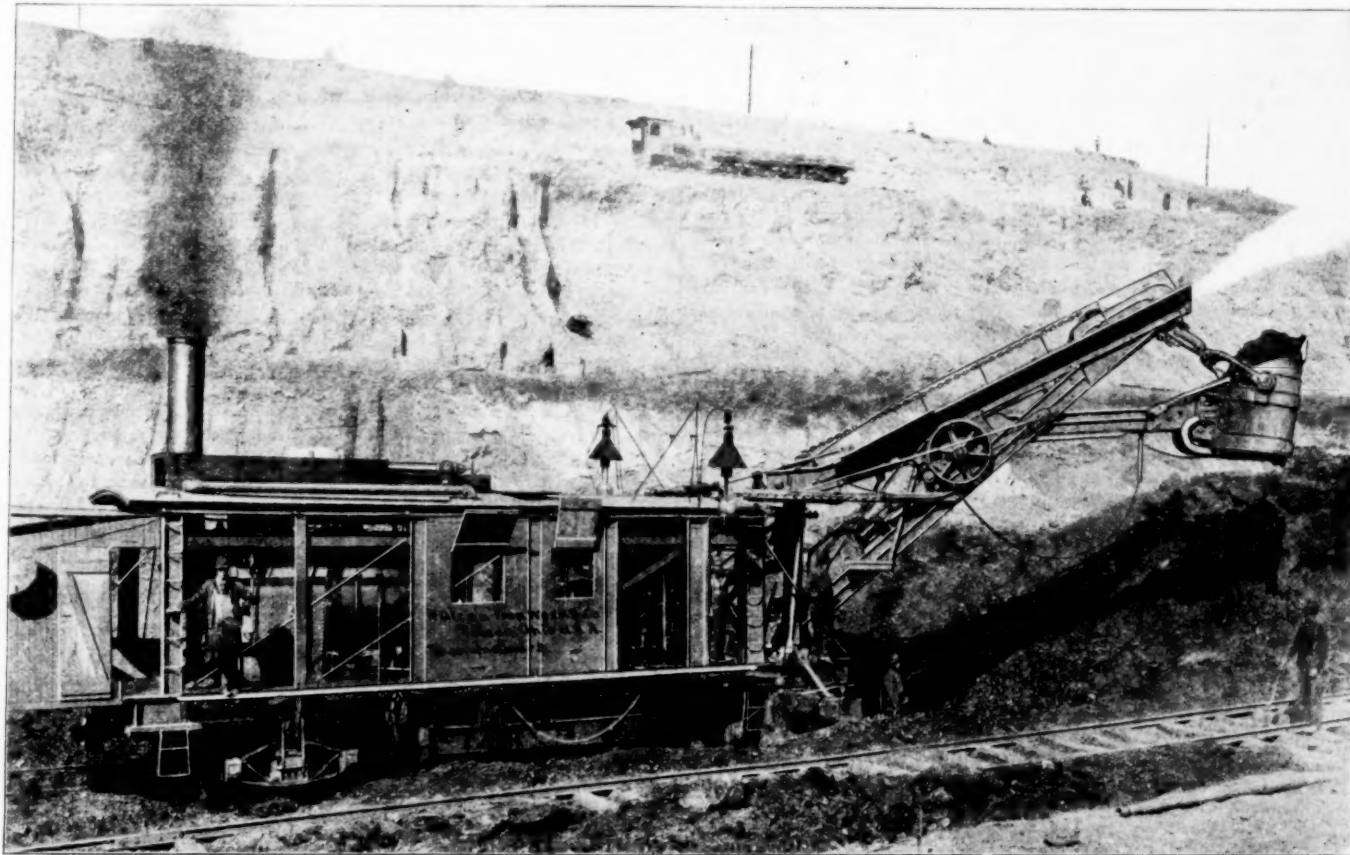
cylinders, double; 40-horse-power swinging engines, 35-horse-power crane engines, 60x6-inch hoisting gear, with a 10x6-inch brass pinion; 16x32-inch hoisting drum, 48x4-inch swinging gear, with a 7x4-inch brass pinion; 9x30-inch swinging drum, 42x4-inch crane engine gears, with 6x4-inch brass pinions; 5½-inch steel shipper shaft, with pinions cast solid to

Coffee Mills.

The multitude of household articles offered to the public include some improved devices that have found exceptional favor. The coffee mills illustrated herewith are of this improved character. They are both one-pound mills. The "Crystal" coffee mill has both canister

tures this arrester, and will give further information concerning it. The company's product includes a complete line of telephone specialties, an attractive pamphlet concerning which is now ready for distribution.

The report of the State auditor shows that the assessed value of personal prop-



"VULCAN" STEAM SHOVEL—RECORD, 170,000 TONS OF SOLID BANK, OPEN-PIT IRON MINE, IN 28 DAYS.

15-inch steel sills; is equipped with special "Fox" pressed-steel patent car trucks, with 33-inch wheels; has a 2½-cubic-yard dipper, a 15-inch steel dipper stick or handle, 16 feet long, with steel racking fitted to same, and employs 1¼-inch hoisting chains 120 feet long and 1½-inch swinging chains 31 feet long. The crane is 23 feet high from track and 21 feet out from mast, has a 14-foot clear

same, fitted with adjustable brass boxes; steel jack-arms, with 16-foot spread; 5½-inch steel screws, 1200-gallon water tank hung under car. The shovel complete weighs about 90 tons, and has a capacity to handle 3500 cubic yards of almost any material in ten hours. It has a record of handling 6000 gross tons of iron ore from the solid bank in a day of nine hours; also of handling 3000 cubic

and tumbler of bright and clear glass, secured to iron frame by clamps and rubber cushions, so there is no danger of breakage. Its appearance speaks for itself. The "X-Ray" is another mill of new design. It has wood frame and hopper, with glass front, thus presenting the coffee always in sight. The Arcade Manufacturing Co. of Freeport, Ill., manufactures these mills.

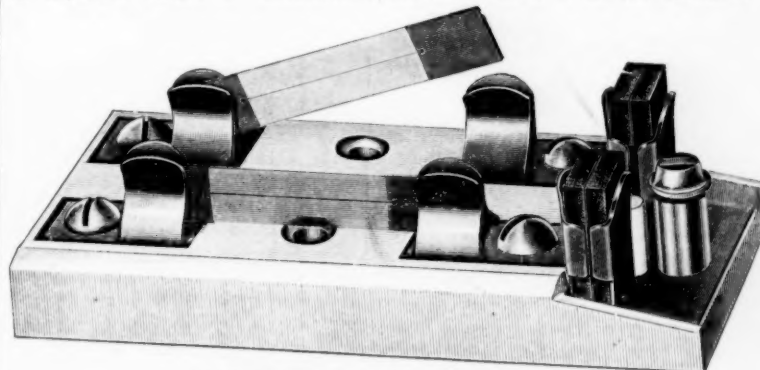
erty in Mississippi is \$54,400,336, an increase of more than \$9,000,000 over 1890.

Included in the government estimates for 1902 for river improvements in Mississippi, Louisiana, Arkansas, Tennessee and Alabama are undertakings aggregating about \$4,000,000.

The December issue of The Chautauquan has a three-color cover design, a sketch of Christmas observances in foreign lands and a poem entitled "The Shrinking Earth," apropos of the international situation at the last Christmas

Double-Pole Lightning Arrester.

The production of electrical supplies is an important branch of manufacture.



DOUBLE-POLE LIGHTNING ARRESTER.

The constant increase in the use of electricity for many purposes creates a large demand for such apparatus. An illustration presented herewith represents an important specialty in the electrical line. It is a fuse block and lightning arrester, double-pole. The maker of this block claims that it is the cheapest, most compact and serviceable lightning arrester on the market, and recommends it to users. The American Electric Fuse Co. of 345 South Canal street, Chicago, manufac-

of the century. An exceedingly interesting set of Chinese folk stories, told by Chu Seoul Bok and Americanized by Vincent Van Marter Beede, will give exceptional insight into Chinese thought and humor. In "The Rivalry of Nations: World-Politics of Today," Professor Start brings his study up to the status of general European policy as based upon the Congress of Berlin. In "A Reading Journey in the Orient" the course of travel is "Down the Nile to Cairo."



IMPROVED COFFEE MILLS.

lift with the dipper door open. The shovel will dump 25 feet from the mast either way; it has large steel sheaves 18 to 24 inches diameter, compound propelling rig with 14-inch steel clutch and 27-inch steel-chain wheels, heavy drop-forged propelling chain, locomotive boiler 66 inches diameter by 14 feet 6 inches long, 135 pounds steam pressure; 128-horse-power hoisting engines, 8x10-inch

yards of blasted rock in ten hours.

The Vulcan Iron Works Co. of Toledo, Ohio, builds this machine. This company has devoted many years to the design and construction of steam shovels, and during its existence has acquired an equipment and plans and specifications not excelled in its specialty. It built the machine mentioned above as in use twenty years after its construction.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., December 12.

The week under review has been a fairly active one in the local lumber trade. A brighter outlook for the winter months is apparent, and manufacturers and dealers view the situation in a much more favorable light. At the annual meeting of the Baltimore Lumber Exchange, held on Monday last, there was a good attendance, and from the report of President Dill an improvement was shown for the year in general conditions. Statistics submitted at the meeting showed that the receipts of lumber to November 1 amounted to 370,941,359 feet, while foreign exports amounted in value to \$2,735,518. The demand during the past week for North Carolina pine has been of better volume; box grades are in good shape, and dealers are purchasing more freely in flooring and other grades. Values may be written very steady throughout the list. In white pine the distribution is fair, with values unchanged. Georgia pine and cypress are both firmer, with receipts moderate. The hardwood market is improving, and the indications point to a better volume of business later on. The foreign export trade is unchanged, and, with a quiet market abroad and high rates of ocean freights, no improvement is expected until the new year opens and business matters for this year adjusted.

Savannah.

[From our own Correspondent.]

Savannah, Ga., December 10.

As the winter months approach the prospect for more than an average volume of trade in wood products is encouraging. The demand, both foreign and domestic, is more pronounced, and from South American ports, with which a very large trade was done years ago, is about to return again. The inquiry from Northern and Eastern centers improves as the weeks go by, and the popularity of Georgia pine is attracting new markets for that commercial wood. At home the milling sections all report a better outlook, and orders are being filed in greater numbers. Prices hold very steady for all desirable grades, and on Saturday last the market closed with a firmer tone all round. Lumber f. o. b. vessels at this port is quoted as follows: Minimum yard sizes, \$10.50 to \$11; car sills, \$12.50 to \$13; difficult sizes, \$14 to \$18; ship stock, \$16 to \$18; sawn ties, \$8 to \$8.50, and new ties, 35 to 38 cents. A matter of great interest to the lumbermen of this port is the project of a 28-foot channel from Savannah to the sea. News was received last week that the report of the board of engineer officers which recently made an examination of the river and harbor work here and the former 28-foot project had been laid before Congress, and that the report was entirely favorable to the project. Savannah lumber people feel encouraged by this news, and hope that the appropriation named may be granted. In regard to the market for freights on lumber, coastwise and foreign, the scale of rates holds very steady; quotations for lumber by rail to Baltimore and eastward, including Portland, Me., \$4.50 to \$5.75 per thousand feet; steamer rates Savannah to Baltimore, \$5 to Pennsylvania Railroad or Baltimore & Ohio docks; to Philadelphia, 10 3/4 cents per cwt. (four pounds to foot); to New York,

\$6.50 per 1000 feet, \$7.25 to dock; lightered to Boston, \$8.50.

Pensacola.

[From our own Correspondent.]

Pensacola, Fla., December 10.

The distribution of timber and lumber at this port shows that there is a full average trade in progress, and conditions surrounding the local market such as to warrant a good volume of business during the winter months. During the month of November nearly 25,000,000 feet of timber and lumber left this port, and at the moment there is a good prospect that the month of December will make a respectable showing. The various reports received from nearby shipping points and milling sections are all favorable, and the demand from the United Kingdom and continental ports, South and Central America, South Africa and various other markets indicate an increased volume of business. Improvements to the various milling plants at adjacent points and the establishment of new lumber enterprises are worthy of notice as indicating a more vigorous development of timber lands in this section of Florida, Alabama and Mississippi. The Creelman Lumber Co. of Cairo, Ill., has begun operations in this city, having located here for the purpose of opening up an export trade. The operations of the firm will be in that section tributary to the Escambia river and Sepulga, Patsagloga and Concord creeks. President Creelman is connected with several lumber and timber firms in the North and South, among them being the F. E. Creelman Lumber Co. of Cairo, Ill. He is also connected with the Hardwood Exporting Co. of Mobile, Ala. At a meeting of the Chamber of Commerce last week Secretary Watson laid some correspondence between himself and Captain Judson of the United States engineer corps before the meeting relating to harbor improvements. Captain Judson says that under existing orders there will be \$10,000 left of the \$70,000 appropriation after the Rittenhouse-Moore Company has removed the 235,000 cubic yards and expenses of the complete inspection and survey have been made in the spring of 1901. If the balance is expended it will widen the channel to 280 feet, thirty feet deep, leaving a strip of twenty feet wide along the bank of the proposed 300-foot channel not thirty feet deep. If the \$10,000 is not used it will leave the channel only 245 feet wide, with a 30-foot depth, leaving twenty feet on one side and thirty-five feet on the other not having a depth of thirty feet.

Mobile.

[From our own Correspondent.]

Mobile, Ala., December 10.

The week under review has shown a good volume of trade, and, although the market is quiet, the indications are that with the advent of the new year business will show decided improvement. The situation in lumber is regarded as satisfactory, and during the past week 4,168,620 feet were shipped. Since September 1 shipments amount to 27,170,330 feet, against 36,118,613 feet last season. The Gulf Coast Lumbermen's Association met on the 5th inst. in monthly session. It was stated at the meeting that as the production of sawn timber had been curtailed, it is now down to the minimum, the seventy mills on the Gulf & Ship Island Railroad not averaging a car a day. The Cuban business was reported quiet at present, but later on a better demand is expected. The state of the market was fully discussed, and it was the unanimous opinion that the future outlook was all that could be desired. The sawn timber market is quiet, with values easy, ship-

ments for the week amounting to 200,867 cubic feet. The shipments of hewn timber amounted to 6542 cubic feet. The demand for lumber from South America is improving, over 2,000,000 feet going forward to Montevideo and Rosario. The Cuban trade is quiet, while for South Africa nearly 1,000,000 feet went forward. The reports from nearby milling sections are satisfactory, and stocks are not accumulating to any extent. Last week the steamship Asmay was loaded at Ship Island with 2,000,000 feet of timber and lumber, one of the largest cargoes ever shipped from here. She was consigned to Hunter, Benn & Co., who furnished the cargo, the sawing being done by the Farnsworth Lumber Co. Ocean freights are steady, with a moderate offering of desirable tonnage. The following charters were closed last week: Italian bark Lallah Belle, 639 tons, from Mobile to Buenos Ayres or Montevideo with lumber at \$15; two schooners, 1063 and 766 tons, from Pascagoula to New York with ties at 21 cents, and the Italian steamer Ardita, 2281 tons, from the Gulf to one or two Italian ports with timber at 127/6 and 132/6, respectively.

New Orleans.

[From our own Correspondent.]

New Orleans, La., December 10.

During the past sixty days there has been a most pronounced improvement in nearly every avenue of the lumber industry in this section, and indications point to a more than average business during the winter months. The various companies resident in this city, who have, perhaps, the largest interests in timber lands and milling properties which are now being developed and operated in this and adjoining States, are generally of the opinion that a good home and export trade will be developed during the coming year. At the moment the demand for lumber is very decided, both for home and foreign purposes; in fact, the demand is greater than the supply, and stocks in some cases are considerably broken. Yellow pine holds its own in regard to prices, which are now firm and hardening. From all points on railroads entering this city saw-mills are reported busy and generally well supplied with orders. The volume of business in cypress shows great expansion, with all the mills running at full capacity, while shipments are fully equal to the output. Nearly all the mills report stocks of dry cypress lumber lighter than ever before in the history of this industry. Prices continue firm, with no change in the general list. In hardwoods business is improving, with shipments, both domestic and foreign, improving as the months go by. The development of hardwood timber lands is now exceedingly vigorous in parts of this State and in Alabama and Mississippi, and receipts at this port are growing greater each year. That the lumber industry of this section is becoming a more important factor as the years roll around is evident in the improvements in shipping facilities by the opening of the Lake Borgne canal and deepening of the harbor at Horn Island and other points, and New Orleans will in future handle an increased volume of business. At the moment the dredging of Horn Island harbor and Pascagoula, though not completed, is bearing good fruit. Several vessels are now loading at the wharves, taking on cargoes of lumber for South America, and the old process of lightering is a thing of the past. The railroads entering the city are well equipped for general traffic, and the volume of business expected in lumber will likely exceed that of former seasons. Receipts of lumber last week were 2,806,000 feet, and for the season 42,142,121 feet, against 34,505,717

feet last season. Receipts of other building material were 250,000 shingles, 160,000 laths and 111,074 oak staves. While the volume of business in real estate shows a moderate degree of expansion, there is a more decided tone to the market than has existed in many seasons. Real-estate men have great confidence in the future outlook, and owners are advancing prices, while buyers are making investments readily, expecting a further advance in properties. The largest deal in cypress lumber interests ever negotiated in this State was closed on Saturday last with the signing of the charter and election of officers of the Bowie Lumber Co., Limited. The capital stock of the company is \$1,000,000, all paid up, and the company will begin operations on January 1 next. This deal in cypress absorbs the mills at Bowie, Jeanerette, Whitecastle and Des Allamands, each of which is a large cypress plant of itself. The new company will have daily capacity of 300,000 feet of lumber, 600,000 shingles and 75,000 laths, all cypress product. The officers of the company are Robert H. Downman of Waco, Texas, president; T. Gordon Reddy, Jr., of Bowie, La., vice-president and general manager. The Bowie Lumber Co., Limited, owns something like 80,000 acres of cypress swamp.

Lumber Notes.

Messrs. J. R. & T. Bunn of Fairfax, Ga., are erecting a saw-mill of 40,000 feet capacity.

The Emporia Lumber Co. of Houston, Texas, has increased its capital stock from \$100,000 to \$200,000.

The shipments of lumber from the port of Fernandina, Fla., for December amounted to 11,183,340 feet coastwise and foreign.

Receipts of lumber at New Orleans last week amounted to 2,806,000 feet, and for the season 42,142,121 feet, against 34,505,717 feet last season.

After a suspension of four months the mammoth saw-mill of the Southern Lumber Co. at Valley View, Ky., resumed operations on the 4th inst. The Baker Cedar Co.'s plant at Valley View will resume on Thursday.

The sash and blind and planing factory of A. L. Chavannes & Co. of Knoxville, Tenn., was destroyed by fire last week. The total loss is \$5700, with \$3000 insurance. The firm will rebuild the factory as soon as possible.

The Tryonza Land & Lumber Co. of Marked Tree, Ark., has been chartered, with a capital stock of \$6000. The incorporators are W. A. Beasley, Tryonza, Ark.; H. H. Higbee, M. C. Pearce and Henry G. Dent of Memphis, Tenn.

It is stated that Senator A. T. Williams sold recently to the Southern Naval Stores Co. of Savannah, Ga., 120,000 acres of timber land situated in the counties of Taylor, Madison and Jefferson, Florida. The consideration was about \$200,000.

Mr. Lyman G. Nichols, a prominent mill man of Bayou Plaquemine, La., has begun preparations for the erection of a large saw-mill plant near his shingle factory on Bayou Plaquemine, which he hopes to have in operation by the first of next April.

Shipments of lumber from the port of Mobile, Ala., last week amounted to 4,168,620 feet, and for the season 27,170,330 feet, against 36,118,613 feet last season. Shipments of hewn timber were 6542 cubic feet, and of sawn timber 200,867 cubic feet.

The shipments of wood products from the port of Pensacola for the month of

November were as follows: Timber and lumber, 24,288,642 superficial feet; walnut lumber, 54,500 feet; poplar lumber, 50,000 feet; oak lumber, 11,000 feet, and oak staves, 28,793.

The woodworking plant of Miller & Miller of Richmond, Va., was destroyed by fire on Thursday, the 6th inst. The damage to the firm will exceed \$50,000, which is covered by an insurance of \$21,500. A number of outhouses and large quantities of lumber were destroyed.

Last week over 5,000,000 feet of logs arrived at Chattanooga, Tenn., from the upper rivers on the present logging tide. The large receipts of ash and hickory timber at Chattanooga suggests the idea that an axe-handle factory would be a paying enterprise. The National Boat Oar Co. at Chattanooga, it is stated, makes almost every other variety of handle except the kind mentioned.

Among the shipments of lumber from Jacksonville, Fla., the following cargoes were reported: Steamship Westover for Philadelphia with 300,000 feet; schooner Allan T. Phillips for Perth Amboy, N. J., with 420,000 feet; schooner Mary H. Breckway for Bridgeton, Barbadoes, with 310,985 feet; schooner Horace B. Shares for St. Pierre, Martinique, with 304,949 feet, and steamer Seminole for New York with 195,000 feet and 3500 hewn ties, with other cargo.

The Bowie Lumber Co., Limited, of Lafourche parish, Louisiana, was chartered last week, with a paid-up capital of \$1,000,000. This is said to be the largest deal in cypress lumber interests ever negotiated in the State, and includes the four Cameron cypress mills in Louisiana at Bowie, Jeanerette, Whitecastle and Des Allamands. The company as organized will have a daily output of 300,000 feet of lumber, 600,000 shingles and 75,000 laths, all cypress product. The officers of the company are Robert H. Downman of Waco, Texas, president, and T. Gordon Reddy, Jr., of Bowie, La., vice-president and general manager.

It is stated that Mr. Cassius M. Carrier, president of the Sardis & Delta Railroad Co., just organized, is about to erect in Sardis, Miss., at the juncture of the Illinois Central and Sardis & Delta roads, a large lumber plant to cost \$35,000, with an annual capacity of 10,000,000 feet. Sixty-five acres have been purchased in the southern part of the city, upon which the plant and other buildings necessary will be located. Mr. Carrier owns several thousand acres of valuable timber lands in that section and Quitman county, and the proposed new road will run through the heart of this timber and furnish transportation for the logs as they are cut to the mill in Sardis, where they will be sawed for market.

The dredging of Horn Island harbor and Pascagoula, though not completed, is sufficient to demonstrate a vast improvement in the dispatch of loading lumber cargoes. The lightering of cargoes of lumber will soon be a thing of the past, and vessels are now coming to the wharves to load. Last week the British steel bark Castlefield from London began loading at the wharves of the Moss Point Lumber Co. with 300,000 feet of lumber for Buenos Ayres, and dropped down to Horn Island to complete her cargo. The bark Scottish Chief commenced loading a cargo of timber at the Farnsworth Lumber Co.'s wharf on the 3d for Buenos Ayres. The lumber trade is now more active than at any time since 1893.

The regular monthly meeting of the Gulf Coast Lumbermen's Association was held in Mobile, Ala., last week, with the following members present: J. W. Black, Sullivan Timber Co., Mobile, Ala.;

William McGee, Baird Lumber Co., Mobile, Ala.; P. K. Yonge, Southern States Lumber Co., Pensacola, Fla.; W. B. Wright, W. B. Wright Company, Pensacola, Fla.; N. D. McClure, McClure & Gremeyer, Dyas, Ala.; J. E. North, J. E. North Lumber Co., Bond, Miss. The meeting was called to order by Capt. J. W. Black, chairman, and W. J. Kilduff, secretary. The secretary in his report of the condition of the market considered the outlook as a whole decidedly bright. It was stated that the production of sawn timber was down to a minimum, and that the seventy mills on the Gulf & Ship Island Railroad were not making an average of a car a day in the aggregate, the smallest production in the history of the road. The Cuban business was reported quiet, with a better trade expected later on.

The annual meeting of the Baltimore Lumber Exchange was held on Monday last in the Exchange Building, Charles and Lexington streets, with seventy-five members present. President Lewis Dill presided. The report of President Dill referred to the part the Exchange had taken in the recent expositions, the credit system and the adoption of new rules of inspection as special features. Mr. Dill spoke of the improvement in the lumber trade, of exports, domestic and foreign, and covered every avenue of the local lumber industry. The total number of feet of lumber received at Baltimore during the year ending November 1 was as follows: By water in Back Basin district, 51,391,359 feet; by water on steamer and private docks, 177,000,000 feet; by railroads, 142,550,000 feet, making a total of 370,941,359 feet. The foreign exports were made to fourteen different countries, and consisted of lumber and logs 70,276,000 feet and staves and headings 1,946,521 pieces, the total value of which was \$2,735,518. The election of officers for the ensuing year resulted as follows: President, Lewis Dill; vice-president, Henry P. Duker; treasurer, Joseph Owens; managing committee, Francis E. Waters, Richard W. Price, S. P. Ryland, Jr., William M. Burgan, Geo. W. Eisenhauer, Ridgway Merryman, James L. Gilbert, Henry P. Duker, Norman James, George Schumacher, Samuel D. Helfrich and George E. Waters.

TRADE NOTES.

Furniture-Manufacturing Opportunity.—A whole or part interest can be obtained in an established Southern coffin and furniture-manufacturing business at Wilmington, N. C. The owner is Preston Cumming.

Ice-Manufacturing Opportunity.—An opportunity to buy either entire or half interest in an established ice-manufacturing business is offered by "A. B." care of Manufacturers' Record. The factory has capacity of twenty-five tons, and is located in a prosperous Southern city.

Silver-Plating Plant.—The attention of investors and those engaged in silver-plating is called to the offer of sale made by Messrs. Richard Walke and W. H. White of Norfolk, Va. The sale will be held at the Real Estate Exchange on December 19. The plant is entirely complete, and has been in successful operation.

Dust Exhaust Systems.—Some leading industrial plants have installed the improved exhaust system manufactured by the Sterling Blower & Pipe Manufacturing Co. of Hartford, Conn., and find it to give entire satisfaction. One of the most recent installations by the Sterling Company was that for the Manhattan Brass Co. of New York.

Opportunity in Cottonseed Oil.—The growing importance of the cottonseed industry is generally acknowledged. The developments that have been made in the manufacture of various salable articles from the by-product of the gin and the possibilities for the future make this an especially promising business to engage in. An opportunity to purchase an established oil mill of forty tons

capacity is now offered by the Sulphur Springs (Texas) Oil Co.

Rand Drills.—The Paris agent of the Rand Drill Co. of New York reports that all the compressors and drills which were on exhibition at the exposition have been sold. The large "Corliss Compound Compressor" was purchased by Messrs. J. & A. Niclausse, manufacturers of the famous "Niclausse Water-Tube Boilers," by whom it is to be used for operating pneumatic tools in their extensive establishment. This compressor supplied air to the American exhibits.

Buying Oil Filters.—Industrial companies about to invest in oil filters will find it to their advantage to examine the merits of the "Cross Oil Filter" made by the Burt Manufacturing Co. of Akron, Ohio. Some of the most critical and leading industrial operators of this country buy this make of filter. Two recent orders filed by the manufacturer came from the Harrisburg (Pa.) Foundry and Machine Works and from the Delaware & Hudson Canal Co. The last-named ordered twenty-one filters.

Cars and Car Wheels.—The South has entered with confidence into the production of a multitude of industrial necessities. Cars and car wheels are recognized as among the most important of such necessities, and a leading establishment in this line is the Peacock's Iron Works of Selma, Ala. This company has had such long experience and is so completely equipped for its purpose that it invites inquiries for prices. A trial set of wheels will be furnished to convince users of the quality of the Peacock product.

A Well-Known Lubricant.—To those who read between the lines the following letter recently received by Adam Cook's Sons, 313 West street, New York, only makers of "Albany Grease," is of interest as showing the general satisfaction found by a test of this well-known lubricant and the consequent desire not to be without it. The superintendent of an Alabama cotton-oil company writes: "Please ship us at once, by freight, one barrel of Albany Grease same as half-barrel you shipped us. I have tested your grease thoroughly, and am more than pleased with it. Please hurry forward the shipment as soon as possible."

Expansion.—Owing to a constantly-increasing demand for its products, the Sprague Electric Co. has increased the floor space in its New York offices, located on three floors of the factory. The New York factory is devoted exclusively to the manufacture of the various lines of interior conduit and appliances which have brought the art of electric wiring to an absolute simplicity. The company operates a still larger plant in Bloomfield, N. J., where are manufactured all the light and power apparatus, such as generators, motors, fans, elevators, hoists, etc. A new branch office will be opened soon, details of which will be given later.

Improve Your Opportunity.—The young man who has learned something of the world and acquired maturity of judgment can obtain more benefit from a school between the ages of twenty-five and twenty-eight than between eighteen and twenty. This is especially true of professional training. Workers desirous of improving their opportunity cannot spare the time or money for a college course, but thousands of them can and are studying successfully by mail. The International Correspondence Schools of Scranton, Pa., finds that the average age of its students is over twenty-five years, and that the greater number of them are actually engaged in the professions they are studying.

They Supply Power Transmission.—One of the very important factors entering into the profitable operation of manufactories of various kinds is the power-transmission plant. To properly plan and specify a power-transmission equipment and then install it to the best advantage is the work of the expert. American engineers and machinery dealers have attained a high reputation for their services in this branch of industry, among them being Messrs. Julius Uhlein & Co. of 134 West Second street, Cincinnati. This firm has fulfilled some important contracts both North and South, and is offering its services at consistent prices to those desirous of installing new transmission, enlarging established equipments or rehabilitating worn apparatus. Messrs. Uhlein & Co. offer only high-grade power-transmitting machinery, shafting, pulleys, hangers, couplings, friction clutch pulleys, etc.

Manganese-Mining Investment.—The continual expansion of iron and steel manufacturing in this country naturally increases

largely the demand for the materials consumed in such manufacture. One of the materials used largely in steel production is manganese, and the development of deposits of this mineral has afforded many companies and firms profitable business. The New England Manganese Co. controls a manganese mine in Georgia that has been inactive until recently because of the settling of an estate, and it is now proposed to make the most thorough developments of this property. In order to provide the necessary funds for repairing the machinery, railroads and other apparatus connected with developments, an amount of treasury stock is to be sold. Investors desirous of investigating can address C. F. White, the company's fiscal agent, 45 Milk street, Boston.

A Perfected Roofing.—One of the most important portions of any building structure is its roofing. This is especially true of business houses of various characters, and of mills, shops, depots, piers, also many others. Durability and satisfactory service are main requirements in roofing, together with imperviousness to moisture, fire, frost and other actions of the elements. A roofing of this kind which has proved its quality during a life of nineteen years is the "Perfected Granite Roofing" manufactured by the Eastern Granite Roofing Co. of Jersey City, N. J. This roofing is both water and fire proof; it is applied to the flattest roofs and made absolutely tight. It is also used for the steepest roofs, the composition not being affected by the heat of the sun. It is not a coal product, but a composition of the highest grades of asphaltum and other ingredients, giving as a result the greatest resistance to gases and sulphurous fumes and the action of the weather.

Portable and Self-Contained Light.—Contractors, quarrymen, dredgers, dock builders, railroad constructors and many other contractors in various industrial branches find the want of a portable, self-contained and automatic light for use in their operations. The nature of the work conducted by the class of men mentioned is of such a character that the light adopted must be totally unaffected by the weather. It must also manufacture its light from some material easily and readily obtained in all sections of the world. Such a light is the "Wells Light," which has from 800 to 2000 to 4000 candle-power, utilizing kerosene oil. Thousands of contractors have used this light and been satisfied thoroughly with its efficiency. The Wells Light Manufacturing Co., Edw. Robinson, proprietor, 44 Washington street, New York, manufactures the "Wells Light." Mr. Robinson has just returned from a trip through the West, and reports business generally as on an increasing basis. He took some important orders in the sections visited.

Leading Portland Cements.—The increasing use of Portland cements in numerous classes of construction and building work and other branches of industry has been particularly marked during the past several years. The manufacturers of these cements have devoted much experiment, invention and special machinery to the production in the most perfected forms, and their success has been constantly attested by the important work on which it is used. The Lawrence Cement Co. of 1 Broadway, New York, has long been a leader in this branch of supplies, and its constantly-increasing trade and the important industrial, railroad and government contracts on which its cements are specified stand as lasting testimony to the perfection of and value of its product. "Dragon Portland Cement" stands the very highest requirements, including all the cold water, steaming and boiling tests, and hundreds of thousands of barrels of it have been used during the last eleven years in general construction work in all the chief cities of the United States, and in many foreign cities. "Dragon" was used on government work at the Norfolk and Brooklyn navy-yards, Indian Head, Lake Denmark and Ellis Island Immigrant Station. And in New York many of the best sidewalks of the metropolis are laid with this brand of cement. These few remarks indicate the varied adaptability of this cement. Another brand, equally important, is the "Hoffman," of which more than 15,000,000 barrels have been consumed during the fifty years past. More than 1,000,000 of these barrels were used on United States government construction work—fortifications, locks, dams, buildings—and "Hoffman" has been used extensively by the leading railroad systems of the country. Descriptive pamphlets regarding these cements are of interest to any consumer of or dealer in cements, and they are invited to request the Lawrence Cement Co. for a copy.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

ALABAMA.

Anniston—Carpet Mill.—The Anniston Carpet Co. is installing several new looms.

Birmingham—Coal Mines, Coke Ovens, etc. D. M. Drennen, F. W. Hopkins and F. M. Drennen have incorporated the Palos Coal & Coke Co., with capital stock of \$100,000, for the development of coal and iron mines at Palos, in Walker county, and for building and operating coke ovens, blast furnaces, etc.

Birmingham—Candy, etc., Factory.—Chartered: The Jebeles & Collins Co., with capital stock of \$25,000, to manufacture candy, chewing gum, crackers, bread, etc.

Birmingham—Machine Shops, Iron Foundry, etc.—The Tennessee Coal, Iron & Railroad Co. is making improvements at Ensley, including extensions to its machine, foundry and pattern shop buildings. The extension to machine shop will probably be occupied by the Linn Iron Works, which, it is stated, will be transferred from Birmingham. A new and improved battery of gas producers is being added to the present producer plant, and a new and separate producer is also being installed. Two of the ten open-hearth furnaces have been converted into mixers.

Gadsden—Water-works.—The legislature has authorized the city's issuance of \$100,000 of bonds for the purpose of buying or constructing system of water-works. Address "The Mayor."

Huntsville—Cotton-spinning and Knitting Mill.—W. H. Rowe & Son of New York will build the \$300,000 textile mill reported last week as arranged for by T. W. Pratt. Mill will spin yarns, dye same and knit them into underwear. Charles Shaver is in Huntsville, representing the firm, to select site.

Pittsboro—Cotton Mill.—The Broadus Cotton Mill Co. has been organized, with C. F. Broadus, president, to build a new \$50,000 mill.

Tuscaloosa—Clay Deposits.—H. E. Reynolds, passenger and immigration agent of the Mobile & Ohio Railroad Co., is endeavoring to interest Ohio capital in the development of clay lands along the line of the road.

ARKANSAS.

Carlisle—Cannery.—The Carlisle Canning Co. has been chartered, with capital of \$10,000, and John H. Van Dusen, president; W. N. Cross, vice-president; F. P. Davis, secretary, and P. W. Echlin, treasurer, to establish a cannery. Address secretary.*

El Dorado—Water-works.—The district will construct a system of water-works. E. O. Mahoney, secretary, can give information.*

Harrison—Oil and Gas Wells.—The Harrison Water, Gas & Oil Co. has been organized, with capital stock of \$200,000, for development of oil and gas lands.

Hot Springs—Mercantile.—Chartered: The C. H. Weaver Co., with capital stock of

\$7000, by C. H. Weaver (president) and others.

Hot Springs—Novelty Company.—The Garland Novelty Co., with capital of \$5000, has been chartered to operate mechanical musical devices, by W. W. Waters and others.

Marked Tree—Land and Lumber Company.—The Tyrone Land & Lumber Co. has been chartered, with capital stock of \$6000, by W. A. Beasley, Tyrone, Ark.; H. H. Higbee, M. C. Pearce and Henry G. Dent of Memphis, Tenn. Company will develop lands and operate mills. At present only one mill with capacity of 200,000 feet per month will be operated. Address W. A. Beasley.

Olney—Shingle Mill.—The Goodwin Shingle Co., reported during the week as incorporated, has mill in operation; A. W. Robinson, president.

Siloam Springs—Investment Company.—The Monte Ne Investment Co. has been incorporated, with capital stock of \$100,000, to maintain a pleasure and health resort, build new town, construct and own electric-light plant, mills, water-works, etc., at Monte Ne, now known as Silver Springs. W. H. Harvey is president and treasurer; Edward C. Rensch, vice-president, and J. E. Hix, secretary.

FLORIDA.

De Land—Water-works Improvements.—A new pumping engine will be installed, and estimates are wanted. Address "City Water Committee."

Jacksonville—Naval-stores Company.—A. S. McMillan, Fulton Saussy and E. C. Long of Jacksonville, N. G. Wade of Mount Brook and others have incorporated the Mutual Naval Stores Co., with capital stock of \$150,000, for the manufacture of naval stores.

Jacksonville—Gas Works.—Northern parties will incorporate a \$500,000 company for the establishment of gas works in Jacksonville. Attorney John E. Hartridge will probably inform.

Jasper—Electric-light and Ice Plant.—The City Power Co. has been chartered, with capital stock of \$20,000, to build the electric-light plant and ice plant lately reported to be erected by B. E. Lennard and others; water-works are already installed.*

Kissimmee—Electric-light Plant.—W. C. Mognard has received franchise for erection of an electric-light plant.

Miami—Road Improvements.—The county will issue \$100,000 of bonds for construction of public roads, etc. Address "County Commissioners."

GEORGIA.

Alice—Cotton Mill.—Tate, Simons & Co., Harmony Mills, will rebuild mill recently burned; capacity of former mill was 780 spindles.

Atlanta—Mercantile.—Chartered: The Law Brothers Company, by George R. Law and others, with capital stock of \$15,000.

Augusta—Water-works Improvement.—The water commissioners propose to construct a receiving basin to cost \$4000 at the pumping station; Nesbit Wingfield, superintendent public works.

Augusta—Land and Industrial Company.—E. L. Martin and Percy Ketchum of Augusta, D. M. Mallory of New York city and George W. Saxon of Tallahassee, Fla., have incorporated the Southern Land & Industrial Co., with capital stock of \$25,000, and privilege of increasing to \$1,000,000, for the development of real estate, erection of dwellings and factories, construction of water-works, gas and electric plants, etc.

Cedartown—Foundry.—W. W. Prior will rebuild his foundry, reported burned.

Cedartown—Iron Furnace, etc.—The Alabama & Georgia Iron Co., office 39 Broadway, New York, will erect another four-log washer, install another steam shovel and put on dummy engine to shift the ore cars at Grady. With this additional equipment the company will mine 1000 tons of iron ore daily.

Cedartown—Cotton Mill.—The Standard Cotton Mills, reported incorporated a year ago, is about to complete contracts for erection and equipment of its 10,000-spindle plant to cost \$300,000. William Parker is manager.

Cedartown—Ice Factory.—H. H. Van De-vander, J. R. Barber, L. S. Ledbetter and B. F. Lowther have purchased an ice factory in Cartersville and will remove it to Cedartown, improve and operate it. It was reported several weeks ago Ed Van Winkle and others had organized a company for establishment of ice factory, but they will

combine with the above-mentioned in establishment of one plant.

Elberton—Flour Mill.—D. P. Oglesby and H. J. Brewer will build a 75-barrel flour mill, as lately reported; also corn mill.*

Fairfax—Saw-mill, Planing Mill, etc.—J. R. & T. Bunn are erecting a saw-mill (as lately reported) of 40,000 feet daily capacity; also putting in a planing mill, dry-kiln, shingle and stave mill, expending about \$100,000.

Georgia—Manganese Mines.—The New England Manganese Co. proposes to expend considerable capital in repairing, renovating and improving the machinery, railroads and other equipment used for developing its manganese deposits. H. T. Pevear of Lynn, Mass., is secretary.

Georgia—Mineral-land Development.—The company reported lately to be organized by F. W. Crandall and others for development of 50,000 acres of timber and mineral lands in North Georgia will be known as the Alaculsey Lumber Co., with capital stock of \$150,000. Operations will be commenced at once. Address F. W. Crandall at Elkland, Pa.

Macon—Ammonia Plant.—The Macon Gas Light & Water Co. has established an ammonia plant in connection with its gas works.

Macon—Mercantile.—Chartered: The Cox & Campbell Co., with capital stock of \$30,000, and privilege of increasing to \$75,000, by W. R. Cox and others.

Rome—Electric-power Plant.—The City Electric Street Railway will expend \$25,000 in increasing its power and purchasing new equipment.

The Glades—Cotton and Woolen Mill.—A. G. Jennings contemplates the establishment of a mill for manufacturing ventilated quilts and robes.

Thomasville—Electric-light and Gas Plant. Robert Gamble has purchased the electric light and gas plant of the Thomasville Electric Light Works for \$15,800, and will improve and enlarge same.

Thomasville—Hardwood Works.—F. D. Dismukes, Jr., has established the Thomasville Hardwood Works, and will begin operations January 1.

Thomson—Cotton Mill.—The John E. Smith Manufacturing Co. has awarded contract for additional machinery to increase output 50 per cent.

Thomson—Glennery.—The Georgia Cotton Oil Co. of Augusta is investigating with a view to establishing the glennery in Thomson reported during the week.

Thomson—Water-works.—The city will hold an election in February to decide the issuance of \$25,000 of bonds for construction of water-works; Ira E. Farmer, mayor.

Thomson—Cotton-oil Mill.—J. C. & J. E. Clatt are preparing to erect a cotton-oil mill.

Warrenton—Cotton Mill.—The erection of a 2500-mule-spindle cotton mill is contemplated. Address B. L. Battle, secretary.*

Washington—Metal-breeching Works.—C. E. Smith, T. C. Hogue, T. M. Green, H. P. Quinn and others have incorporated the Washington Metal Breeching Co., with capital stock of \$4000, for the manufacture of metal breeching, etc. Address C. E. Smith.

KENTUCKY.

Covington—Power Plant.—Charles E. Price, who is said to represent the Edison Light Co. of Cincinnati, Ohio, has purchased the plant and franchises of the Suburban Illuminating, Heating & Power Co. at Covington for \$181,000.

Hopkinsville—Tobacco Factory.—The Hopkinsville Tobacco Manufacturing Co. (established) has incorporated, with capital stock of \$50,000, which will be increased to \$100,000; capacity of factory will be enlarged. E. M. Flack, E. E. Lindsay, L. H. McKee and others are the incorporators.

Paint Lick—Broom Factory.—Joe McCormack is establishing a broom factory.

Winchester—Brick Works.—R. P. Scobee has purchased, will complete and operate the Winchester Brick Works; capacity 50,000 per day.

LOUISIANA.

Algiers—Workshops, etc.—R. B. Bradford, chief of bureau of equipment, U. S. N., Washington, D. C., has asked for estimates for naval workshop for the Algiers station; shops will occupy building 300x60 feet and cost about \$100,000; coal depot and storage bunks will also be constructed at Algiers

with capacity for 15,000 tons of coal, with latest machinery for moving and hoisting fuel.

Belle Isle (not a postoffice)—Salt Works.—The Gulf Salt Co. will expend \$500,000 in improving its property and increasing output from 700 barrels to 5000 barrels of salt per day. John W. Gates, Chicago, Ill., is interested, and can probably give full particulars.

Donaldsonville—Cotton Mill and Cotton-seed-oil Mill.—The erection of a 5000-spindle and 150-loom cotton mill and a cottonseed-oil mill is contemplated. Address for particulars M. D. Bringer, Burnside, La.*

Lafayette—Ice Factory.—The People's Cotton Oil Co. has awarded contract for erection of a 25-ton ice plant.

Longleaf—Saw-mill.—The Crowell & Spencer Lumber Co., Limited, is rebuilding its saw mill burned lately.

New Orleans—Planing Mill, etc.—The Opdenweyer Cypress Lumber Co., Limited, is erecting planing mill of 25,000 feet capacity per day, as reported during the week, and may add in the near future machinery for manufacture of boxes, crates and other light packages.

New Orleans—Lard Factory.—The N. K. Fairbank Co. of 277 Dearborn street, Chicago, Ill., reported recently to establish soap factory at Gretna, states that it will build the factory, but is undecided whether it will manufacture soap or not; the present plan contemplates only a lard-compound factory.

New Orleans—Ice and Cold-storage Plant. Henry Koehler, St. Louis, Mo., president American Brewing Co., is investigating with a view to establishing ice plant of 100 tons capacity and cold-storage plant in New Orleans.

Plaquemine—Saw-mill.—Lyman G. Nichols will erect saw-mill in connection with his shingle mill.

Richland Parish—Timber Lands.—Brown & Halliburton of Memphis, Tenn., have purchased 21,000 acres of hardwood timber lands in Richland and West Carroll parishes, Louisiana. Address J. W. Brown, 63 Equitable Building, Memphis.

Shreveport—Repair Shops.—The Vicksburg, Shreveport & Pacific Railroad Co. will erect repair shops at Shreveport. W. J. Murphy, general manager of Queen & Crescent Route, Cincinnati, Ohio, can probably inform.

MARYLAND.

Baltimore—Tobacco Factory.—J. W. Clausen, E. Wagner, H. B. Dillham and others have incorporated the Clausen-Wagner Company to manufacture tobacco.

Baltimore—Tobacco Company.—The William Bucholtz Leaf Tobacco Co. has been chartered for dealing in tobacco, by William Bucholtz, Samuel White, Chas. Buchi and others. The capital stock is \$5000.

Baltimore—Mercantile.—Chartered: The Carey, Rayne & Smith Co., with capital stock of \$500,000, to succeed Carey, Rayne & Smith, dry goods commission merchants, 17 West German street.

Baltimore—Paper-bag Factory.—William H. Coleman (care of "Howard House") contemplates the erection of a factory for producing paper bags; will locate either in Baltimore or Virginia, and is prepared to receive inducements to locate.*

Cumberland—Machine Shops, Electric Plant, etc.—The Baltimore & Ohio Railroad Co., F. D. Underwood, general manager, Baltimore, will, it is reported, make extensive improvements at its Cumberland shops at a cost of \$50,000; also install a new electric-lighting system.

Midland—Coal Mines.—The George's Creek Coal & Iron Co. (office, Baltimore) is developing three new coal mines near Midland.

Midland—Coal Mine.—The Columbia Coal Co., recently organized, has leased and is developing coal lands near Midland.

MISSISSIPPI.

Natchez—Power Plant.—The Natchez Electric Street Railway & Power Co. has been chartered, with capital stock of \$150,000, by A. G. Campbell, Capt. James W. Lambert, Thomas Reber and others.

Seranton—Bridge.—A steel bridge will be constructed over Big creek. "County Supervisors" may be addressed.*

MISSOURI.

Farmington—Lead Mines.—The Irondale Lead Co. has been chartered, with capital

stock of \$100,000, by George J. Cole, P. S. Cole, William Harlan and others.

Joplin—Development Company.—The Big Six Development Co. has been chartered, with capital stock of \$48,000, by S. A. Stuckey, S. J. Chitwood, J. D. Allen and others.

Kansas City—Mining.—Chartered: The Alta Mining Co., with capital stock of \$15,000, by Marion Scudder, J. M. Donaldson and others.

Kansas City—Chemical Works.—The Southwest Chemical Co. has increased its capital from \$500,000 to \$700,000.

Kansas City—Iron Works.—H. E. McKinney, James H. Swearingen and N. B. Carskadon have incorporated the Swearingen Shutter & Iron Works Co., with capital stock of \$5000.

Kansas City—Electrical Subway Company.—Chartered: The Interstate Electrical Wire Subway Co., with capital stock of \$200,000, by W. S. Woods, William Huttig and Joseph J. Helm, to operate underground telephone and telegraph lines.

Poplar Bluff—Ice Company.—The Poplar Bluff Ice Co., with capital stock of \$3500, has been chartered by D. P. Bacon, C. B. Bacon and W. B. Hayes.

St. Louis—Planing Mill.—C. A. Olcott, E. S. Olcott, W. A. Ford and others have incorporated the Charles A. Olcott Planing Mill Co., with capital stock of \$75,000.

St. Louis—Plow Works.—The Gatling Plow Co. has been chartered, with capital stock of \$50,000, by Richard J. Gatling, H. Henderson, F. J. Master and others.

St. Louis—Washing-machine Factory.—The Benbow-Brammer Manufacturing Co., reported recently as incorporated, is the consolidation of the Excelsior Manufacturing Co. of Davenport, Iowa, and the Benbow Manufacturing Co. of St. Louis; company will continue to operate both plants until it can secure larger quarters in St. Louis; machinery will be installed for making round tubs for washers.*

St. Louis—Printing.—The Robertson Printing Co., with capital stock of \$20,000, has been chartered by W. P. Robertson and others.

St. Louis—Water Supply.—Edward Butler, John R. Butler, D. O. Taylor, J. McGirk Mitchell and others have incorporated the St. Louis River Water Supply & Power Co., with capital stock of \$50,000, to furnish water supply to the city. It is proposed to tap the Missouri river near St. Charles and pipe the water into St. Louis through suburban towns.

St. Louis—Gas-machine Company.—Chartered: The Home Comfort Gas Machine Co., for manufacturing gas and gas machinery, with capital stock of \$100,000, by W. L. Culver, H. W. Culver, A. A. Sillick and others.

NORTH CAROLINA.

Charlotte—Cold-storage Plant.—The Standard Ice & Fuel Co. will erect a cold-storage plant with capacity for twenty-five carloads; building will be two stories, of brick, and cost \$5000.

China Grove—Furniture Factory.—The China Grove Furniture & Material Co. has been incorporated, with capital stock of \$100,000, for the manufacture of furniture.

Columbus—Saw-mill.—W. J. & R. A. Ford have established a saw-mill.

Fayetteville—Cotton Mill and Match Factory.—The Chamber of Commerce is negotiating for the establishment of a cotton mill and a match factory; F. N. Rose, secretary.

Goldensboro—Land Improvement.—The East Goldensboro Land & Improvement Co. has been chartered, with capital stock of \$100,000, by G. A. Norwood, Jr., George C. Royal, John Slaughter and others.

Goldensboro—Buggy Factory.—The Goldensboro Buggy Co. has reorganized, with authorized capital of \$50,000.

Greensboro—Bobbin Factory.—The North State Bobbin Co. has been incorporated, with capital stock of \$9000, to manufacture shuttles, bobbins and other articles of wood; incorporators are Tyre Glenn, C. L. Scott and Charles G. Burton.

Greensboro—Broom Factory.—The Greensboro Broom Co. has been organized, with capital stock of \$5000, by J. W. Shaw, H. E. Shaw, J. C. Meekins and J. E. Pool.

High Point—Furniture Factory.—The Welch Furniture Co., reported lately as incorporated, will establish a furniture factory at once. Address J. W. Harris, secretary.*

Monroe—Hardware Company.—The Heath Lee Hardware Co. has been chartered, with capital stock of \$60,000, by J. A. Stewart and others.

New Berne—Machine Shop.—L. M. Edger-ton will establish a bicycle repair shop.*

Plymouth—Electric-light Plant.—The Roanoke Lumber Co. is installing an electric-light plant in its mill.

Plymouth—Scroll and Baluster Works.—Machinery is being installed in the Plymouth Scroll and Baluster Works, which will be in operation about January 1.

Polkton—Spike and Handle Factory.—H. C. Dockery & Co. are establishing a spike and handle factory, and may put in sash and door machinery.

Raleigh—Chair Factory.—The Milton Chair Factory has been chartered, with capital stock of \$25,000, by G. T. Hubbard and others.

Rock—Flour Mill.—Shuping Bros. have awarded contract for a 65-barrel flour mill.

Roxboro—Planing Mill.—Massie & Carver will rebuild their planing mill, reported lately as burned.*

Salisbury—Furniture Factory.—Geo. W. Wright is making efforts to organize company for the establishment of a furniture factory, as reported during the week.*

Timberland—Lumber Company.—The Acme Lumber Co. has been chartered, with capital stock of \$14,000, by J. W. McLaughlin, W. H. Britton, James C. Adams and E. P. Rolwell.

Washington—Knitting Mill.—The Washington Knitting Mill Co., with capital stock of \$8000, has been incorporated for the manufacture of cotton goods and yarns, by S. T. Nicholson and others.

Wilmington—Paint Shops.—The Atlantic Coast Line will rebuild its \$30,000 paint shops, reported burned.

Wilmington—Mercantile.—Chartered: The John S. McEachern Sons Co., with capital of \$5000, to conduct general merchandise business, by John S. McEachern and others.

SOUTH CAROLINA.

Anderson—Cotton Mill.—It is rumored that E. A. Smyth, president Pelzer Cotton Mills of Pelzer, S. C., will form a stock company for erection of a large cotton mill at Anderson.

Charleston—Water-works.—The city council has allowed the Charleston Light & Water Co. sixty days in which to sign contracts for the proposed \$1,500,000 water-works.

Charleston—Lumber Company.—The Charleston Lumber Co. has been incorporated, with capital stock of \$100,000, by J. T. Deal of Norfolk, Va.; W. B. Gruber and M. P. Howell of Walterboro, S. C.

Marion—Cotton Mill.—The Ashby Cotton Mills, established and operating 2800 spindles, has been incorporated, with capital of \$100,000, by J. J. Bradley, W. B. Hunnewell and W. G. Mullins; \$70,000 will be available for enlargements.

Mullins—Land Improvement.—The Mullins Land & Improvement Co. has been chartered, with capital stock of \$20,000, by S. E. Smith, president; James Norton, vice-president and manager, and W. F. Norton, treasurer.

Newberry—Furniture and Stave Factory.—Fred H. Dominick contemplates establishing a furniture and barrel-stave factory.*

Newberry—Gold Mines.—The Culbreath Mining Co. has been incorporated, with capital stock of \$100,000, for the development of gold mines in Saluda county. James Y. Culbreath, Dr. James McIntosh and O. M. Jamison are among the incorporators.

Pelzer—Excelsior Factory.—The Dexter Broom & Mattress Co. will install an excelsior factory.*

Union—Furniture Factory.—The Union Furniture Manufacturing Co. has been incorporated for the erection of the furniture factory recently mentioned. W. H. Wallace, D. H. Wallace, A. H. Foster and T. C. Duncan are the incorporators.

TENNESSEE.

Graysville—Cooperage.—The Buquo Lime Co. is looking for location for a slack-barrel cooperage.

Johnson City—Supply Company.—Chartered: The Tennessee Furniture & Supply Co., with capital of \$2500, by W. H. Henderson and others.

Knoxville—Lead and Zinc Mines.—R. H. Hanna, P. O. Box 32, has leased lead and zinc property, as lately reported, and will develop same.*

Knoxville—Lumber Mill.—A. L. Chavannes & Co. will rebuild their \$8000 lumber mill, reported burned.

Knoxville—Machine Works.—D. C. Richards & Sons of the Enterprise Machine Works, recently burned, have awarded contract to the Garland Brick Co. for rebuilding structures, cost to be \$20,000.

Memphis—Screen-door Factory.—E. M. Kemp, president of the Wabash Screen Door Co. of Rhinelander, Wis., is investigating

with a view to establishing a screen-door factory in Memphis.

Memphis—Cannery.—Nashville (Tenn.) parties contemplate the establishment of a cannery in Memphis. Address E. R. Miller, secretary "Industrial League."

Nashville—Power Plant.—The Nashville Railway Co., Richard Emory, general manager, will expend \$50,000 in increasing capacity of and improving its power plant; two new boilers and batteries will be installed.

Nashville—Lumber Company.—The McDowell Lumber Co. has been incorporated, with capital stock of \$3000, by Lemuel McDowell, Buford McDowell, G. L. McDowell and others.

Nashville—Paper-bag Factory.—The American Paper Co. has been incorporated, with capital stock of \$18,000, for the manufacture of paper bags, boxes, etc., by A. S. Woolwine, D. W. Woolwine, James S. Pilcher, Bruce B. Shepard and others.

Nashville—Electric-light Plant.—The city will build a municipal electric-light plant of 400 2000-candle-power arc and 5000 incandescent lamps to cost about \$150,000. Address J. M. Head, mayor.*

TEXAS.

Austin—Telephone System.—The city has granted franchise for establishment of an independent telephone system. Address "The Mayor."

Beaumont—Irrigation System, etc.—The Beaumont Rice Canal Co. has been incorporated, with capital stock of \$300,000, to construct and operate dams, reservoirs, lakes, wells, etc., for irrigation purposes. M. O. Crumpler of St. Louis, Mo.; Guy V. W. Junker and J. N. Votaw of Beaumont are the incorporators.

Corsicana—Oil Wells.—L. B. Emory, Drs. Seale and Sloan, R. E. Dodson, J. F. Maxwell and others are organizing a company to develop oil lands.

Dallas—Acetylene-gas Machine Works, etc.—The New Process Manufacturing Co. will rebuild its plant, recently burned; company manufactures fire extinguishers, acetylene-gas machines, etc.

Denison—Macaroni Factory.—N. F. Ormsby of the Gate City Macaroni Factory will install machinery for increasing capacity from 100 to 500 pounds per day.

El Paso—Electric-light Plant.—The International Light & Power Co. will increase capital stock and double capacity of plant; present capacity is 4000 incandescent and 100 arc lights; J. P. Dieter, president.

Fort Worth—Ice Factory.—D. Brown has purchased machinery for a 30-ton ice plant.

Hearne—Water-works and Street Improvements.—The city will hold an election on December 27 to decide issuance of bonds for construction of water-works and for street improvements. Address "The Mayor."

Houston—Lumber Company.—The Emporia Lumber Co. has increased its capital from \$100,000 to \$200,000.

Yoakum—Cotton Gin.—The Yoakum Gin Co. has been incorporated, with capital of \$4000, by William P. Jenks of Philadelphia, F. E. Dudley and S. L. Serface of Houston.

VIRGINIA.

Bristol—Water-works.—The city is considering new water-works system to cost about \$25,000. Address "The Mayor."

Clifton Forge—Ice Plant.—The Virginia Ice & Cold Storage Co. of Covington, Va., James F. Horton, manager, will build ice and cold-storage plant in Big Stone Gap.

Covington—Ice and Cold-storage Plant.—The Virginia Ice & Cold Storage Co. has been organized, with capital stock of \$50,000, for erection of a 30-ton ice and cold-storage plant. Address James F. Horton, manager.

Fairfax—Woodworking Factory.—Gardner, Dean & Co. of Buffalo, N. Y., are arranging to begin work on the establishment of a \$40,000 woodworking plant at Fulton Park; main building, three stories, dry-kiln and other buildings will be erected.

Fincastle—Telephone System.—The Roanoke & Botetourt Telephone Co., reported lately as incorporated, has system in operation and will extend same; L. A. Noel, president.*

Lynchburg—Filter Plant.—The city is considering the question of a filter plant, but nothing definite has been done; J. G. Payne, chairman committee.

Norfolk—Light, Heat and Power Plant.—The Norfolk Light, Heat & Power Co. has had plans made for its proposed new plant, and contractors are bidding on the work of erecting buildings, etc.; W. D. Pender, vice-president.

Norfolk—Brick and Tile Works.—The Hampton Roads Brick Co. has been incorpo-

rated for the manufacture of bricks, tile, etc., with capital stock of \$25,000; Henry L. Turner, president; George M. Newell, secretary; Chas. A. Stewart, treasurer, all of Falls Church, Va., and William H. Stewart, Portsmouth, vice-president.

Norton—Coal Mines.—W. H. Dent and H. C. Jackson of Embreeville, Tenn., have leased and are developing coal property near Norton.

Reedville—Saw-mill.—Blundon & Hinton are building saw and grist mill.

Richmond—Lithia Springs Company.—Chartered: The Beaufort Lithia Springs Co., with capital stock of \$300,000, by C. W. Tanner, J. D. Robertson and others.

Richmond—Woodworking Plant.—Miller & Miller will rebuild their \$50,000 woodworking plant, reported burned.*

Suffolk—Dry-kiln.—The Suffolk Clay Co. will erect new kiln for increasing its drying capacity.

West Norfolk—Woodenware Works.—The Virginia Cedar Works has been incorporated to manufacture pails, tubs, butter-dishes, kegs, etc., with capital stock of \$100,000; incorporators, R. J. Norfleet, president; N. P. Williams, vice-president; Joseph A. Reens, general manager, and Lucius A. Daugherty, secretary and treasurer.

Wise—Coal Mines and Coke Ovens.—The Virginia Steam Coal & Coke Co., reported lately under Gladeville as incorporated, has 10,000 acres of coal lands which it will develop. Coke ovens will also be built and extensive improvements made. N. B. Dotson, president and treasurer, may be addressed.

WEST VIRGINIA.

Charleston—Mining.—The Carlton Mining & Milling Co. has been incorporated, with capital stock of \$500,000, by G. O. Chilton, J. Hatcher, E. L. Wood and others.

Charleston—Vehicle Factory, etc.—The Capital City Vehicle Co. has been incorporated for the manufacture of vehicles of all kinds, including automobiles, and to operate a blacksmith and wheelwright shop; capital stock is \$100,000; incorporators are D. A. Brawley, Adam B. Littlepage, Dan B. Brawley, S. B. Jarrett, L. L. Price and others.

Fairmont—Picture-frame Factory.—The Hood Manufacturing Co. of Wheeling will remove its picture-frame factory to Fairmont.

McMechen—Electric-light Plant.—A company is being organized for the establishment of an electric-light plant.

Morgantown—Oil and Gas Wells.—The Morgantown Oil & Gas Co. has been incorporated, with capital of \$8000, and privilege of increasing to \$500,000, for the development of oil and gas lands, construction of water-works, etc., by Joseph H. McDermott, David H. Courtney, Thomas P. Reay and others.

New Martinsville—Machine Shops.—The Short Line Railway will construct machine shops; R. J. Cross, president, New York.

Parkersburg—Iron and Steel-sheets Plant.—The Parkersburg Iron & Steel Co. will organize and build a plant for the manufacture of iron and steel sheets. Temporary office is in the Empire Building, Pittsburg, Pa.

Pennsboro—Flour Mill.—J. B. McGregor & Co., M. K. Duty, E. E. Wells, G. W. Thomas and others are forming a company to purchase and put in operation the flour mill of G. W. Thomas.

Pennsboro—Cigar Factory.—L. P. Wilson, D. A. Fawcett, P. M. Ferrell, W. B. Kelly, J. B. Wilson, Robert McCoy, H. A. Dixon, M. K. Duty and others have organized the Dixon Cigar Co., with capital of \$10,000, for the manufacture of cigars.

Piedmont—Lumber Mill.—The Elk Lumber Co., recently chartered, has awarded contract for band mill of 60,000 feet daily capacity; will develop 25,000 acres of timber lands.

West Virginia—Coal and Oil Lands.—A company is being formed by Baltimore (Md.) and New York parties, with capital stock of \$1,000,000, for the purchase and development of coal, oil and timber lands in West Virginia. Harry C. Kilmer of Baltimore is negotiating the purchase of the 3000 acres of lands which will be developed.

Wheeling—Railway Improvements.—The Wheeling Traction Co. will expend several hundred thousand dollars in improvements, which will include new car barns, underground crossings, new motors of greater power, new cars, new rolling stock, etc.

Wheeling—Oil Wells.—The Fort Henry Oil & Mining Co. has been chartered, with authorized capital of \$100,000, for the development of oil wells in Ritchie county. W. F. Lukens is president; Fred W. Brown, vice-president; J. W. Robertson, secretary, and C. A. Mahon, treasurer.

BURNED.

Bristol, Tenn.—City Foundry and Machine Works; estimated loss \$8000.
 Cedartown, Ga.—W. W. Prior's foundry; loss \$1500.
 Knoxville, Tenn.—A. L. Chavannes & Co.'s lumber mill; loss \$8000.
 Richmond, Va.—Miller & Miller's wood-working establishment; loss \$50,000.
 Waco, Tenn.—Waldrop & Jones' cotton gin; loss about \$3000.
 Wilmington, N. C.—Atlantic Coast Line's paint shops; loss \$30,000.

BUILDING NOTES

Aiken, S. C.—Hotel.—It is reported that William R. Tarvers and Hollis Honeywell of New York are interested in the erection of a new hotel at Aiken.
 Atlanta, Ga.—Theater.—Thomas H. Bowles contemplates the erection of a theater.
 Atlanta, Ga.—Church.—The Walker Street Methodist Church will expend \$7000 in enlarging. Address "The Pastor."
 Baltimore, Md.—Hospital.—The Southern Homoeopathic Medical College is having plans made for erection of a new building, to be two stories, 45x65 feet. Address Dr. O. Edw. Jannney.
 Baltimore, Md.—Dwellings.—Francis E. Yewell is receiving estimates on the various branches of work for eighty-four three-story brick and stone dwellings; all modern improvements will be used; cost \$6500 each.
 Baltimore, Md.—Church.—Plans have been completed for the new \$10,000 church of the Faith Evangelical Lutheran congregation, but contract has not been awarded. Address Rev. Dr. Akler, pastor, 1557 North Wolfe street.
 Baltimore, Md.—Building Company.—The Lanvale Building Co. has been organized, with capital stock of \$10,000, by J. C. Rogers (Sun Building), William C. Rogers, Dr. Samuel Belt and others.
 Baltimore, Md.—Telephone Exchange Building.—Jos. Evans Sperry will prepare plans for branch exchange for Chesapeake & Potomac Telephone Co., and for a Hebrew clubhouse to cost \$25,000.
 Baltimore, Md.—Bank Building.—The Safe Deposit & Trust Co. has purchased site at \$62,500 and will erect a one-story structure adjoining its present building; no plans have been made.
 Danielsville, Ga.—Courthouse.—J. N. Bogges, ordinary, will receive proposals until January 15 for erection and completion of county courthouse as per plans and specifications of J. W. Golucke & Co. of Atlanta, Ga. Building will be of brick, stone and wood, 60x80 feet, with tin roof. Certified check for \$2000 and bond required. Usual rights reserved.
 Fayetteville, N. C.—Bank Building.—W. J. Edwards, banker, has purchased building and will remodel for banking purposes.
 Johnson City, Tenn.—Postoffice and Business Block.—Wm. G. Mathes is preparing plans for the immediate erection of post-office and business block, to be of pressed brick and marble, iron and plate glass.
 Miami, Fla.—Courthouse.—The county will issue \$50,000 of bonds for erection of new courthouse. Address "County Commissioners."
 New Martinsville, W. Va.—School Building.—A. Burkhardt has received contract at \$31,297 for erection of building, and M. Williams of Pittsburg, Pa., at \$7200 for heating and ventilating for the proposed city school building.
 Oxford, Ala.—Theater.—The Oxford Lake Line, Howard W. Sexton, general superintendent, will erect a summer theater.
 Parkersburg, W. Va.—Hotel and Bank Building.—The First National Bank is having plans made for hotel and bank building to cost \$150,000, to be seven stories high.
 Pine Bluff, Ark.—Synagogue.—The trustees of Temple Anshe Chai awarded contract to R. H. Hunt of Chattanooga, Tenn., for erection of synagogue to cost \$20,000.
 Raleigh, N. C.—Orphanage.—The Methodist Orphanage will be enlarged by erection of an additional \$25,000 building; Rev. J. W. Jenkins, superintendent.
 Richmond, Va.—Opera-house.—George Arents of New York will organize a company for the erection of a \$100,000 opera-house in Richmond; site purchased for \$18,000.
 Savannah, Ga.—Depot.—The Seaboard Air Line, Southern and Plant system will, it is said, build a \$500,000 union depot at Savannah; John Skelton Williams, president Seaboard Air Line, Richmond, Va.
 Valdosta, Ga.—Hotel.—The hotel reported

recently to be built by the Valdosta Hotel Co., organized for that purpose, will be of brick, stone, terra-cotta and iron, containing sixty-two bedrooms and costing \$50,000.

Valdosta, Ga.—Courthouse.—C. R. Peeples, "Chairman Commissioners," will receive sealed proposals until February 5 for furnishing labor and material and erecting county courthouse as per plans and specifications prepared by J. W. Golucke & Co. of Atlanta. Building will be two stories, basement 90x120 feet, of brick, stone and terra-cotta, with iron trimmings and metal roof. Bid must be accompanied by certified check for \$2000. Bond required and usual rights reserved.

RAILROAD CONSTRUCTION.

Railways.

Abbeville, La.—It is reported that local business men are considering the organization of a company to build a line from Abbeville to Lake Charles by way of Gueydan, La., a distance of sixty-five miles.
 Anniston, Ala.—It is announced that the Anniston Brown Ore Co. has awarded a contract to construct about three miles of line near Alexander Station to the Alabama Construction Co. D. B. Lacy is general manager.
 Ashdown, Ark.—It is reported that the Union Pacific Railroad Co. has become interested in the Arkansas & Choctaw Railroad, and that arrangements are being made to extend it further in a southwestern direction from Arkinda to Texarkana. F. W. Vallant at Rocky Comfort, Ark., is chief engineer.
 Birmingham, Ala.—It is reported that the Kansas City, Memphis & Birmingham Railway Co. has let contracts for the proposed branch in Walker county, which will be about nine miles in length, to C. D. Smith & Co. of Birmingham. D. Bontecou at Kansas City, Mo., is chief engineer of the company.
 Brooksville, Ky.—E. J. Hunter, secretary of the Cincinnati & Licking River Railroad Co., writes the Manufacturers' Record that surveys have been made for the proposed 30-mile extension from Brooksville to Johnson Junction, and that the company is ready to receive bids from contractors. The new mileage will connect the Brooksville Railroad and the Covington, Fleningsburg & Ashland Railroad, controlled by the same company.
 Cape Girardeau, Mo.—It is reported that the Illinois Central Company is negotiating with the Southern Missouri & Arkansas Railroad with the view of securing control of this line and extending it southwest through Arkansas to Texas. The St. Louis, Cape Girardeau & Southern Railroad Co. was recently incorporated to extend the line referred to a distance of forty miles. Louis Houck at Cape Girardeau is president of the Missouri company.
 Diboll, Texas.—C. M. McWilliams, vice-president of the Texas Southeastern Railroad Co., informs the Manufacturers' Record that this line has been constructed from Diboll to Lindsay, in Angelina county, a distance of fifteen miles, with five miles of short branches. It is expected to extend the line later, also to build spurs from time to time. Mr. Williams may be addressed at Texarkana, Texas.
 El Paso, Texas.—The Chicago, Rock Island & Mexican Railroad Co. has been formed to build the proposed connection of the El Paso & Northeastern Railroad and the Chicago, Rock Island & Pacific. The new mileage will extend from Liberal, Kans., the southwestern terminus of the Rock Island, to White Oaks, N. M., a distance of nearly 400 miles. It is stated that the Rock Island intends purchasing the El Paso & Northeastern Railroad and making a connection at El Paso with the Mexican Central. S. P. Hovey at Fort Worth, Texas, is vice-president.
 Fairmont, W. Va.—Right of way is being secured in Marion county for the proposed Fairmont & Fairview Railroad, which will be eighteen miles in length. T. W. Fleming is one of the promoters of the enterprise.
 Florence, Ala.—Jere Baxter of Nashville, president of the Nashville, Florence & Northern Railroad, states that he has made arrangements for contractors to build this line, who will give a bond to carry out the contract. He also claims that he has purchased equipment. This road is proposed from Florence to Litchfield, Ky., by way of Nashville, Tenn.
 Hancock, Md.—J. J. Van Horn of New York has made a proposition to the people of McConnellsburg, Pa., to build the proposed railroad between Hancock and McConnellsburg if a company is organized with authority to issue the necessary securities. He states the construction company he represents will build the railroad for the securities.
 Henrietta, Texas.—It is announced that the Gulf & Brazos Valley Railroad Co. is negotiating with a Michigan syndicate with the view of extending this line from its present north and south termini. The total length of the extension would be about 300 miles. The present road is in operation between Peck City and Mineral Wells, a distance of ten miles. W. A. Squires at Henrietta is president of the company.
 Houston, Texas.—It is announced that the International & Great Northern Railroad Co. has secured what is known as the Oak Lawn & Magnolia Park Railroad, which extends through the suburbs of Houston, a distance of six miles, and will use it for a portion of its terminals at Houston. Leroy Trice at Palestine, Texas, is vice-president of the purchasing company.
 Jackson, Miss.—It is stated that the Illinois Central has let a contract for the construction of its freight-yards at Jackson to J. J. Baxter for \$75,000. David Sloan of Chicago is chief engineer of the railroad company.
 Kansas City, Mo.—It is stated that the Chicago Great Western Railway Co. is making arrangements to build its own road to Kansas City. At present the company rents track from other corporations. A. B. Stickney at St. Paul, Minn., is president of the company.
 Knoxville, Tenn.—It is stated that the work of enlarging the yards of the Southern Railway at Knoxville will soon begin at an expense of about \$50,000.
 Louisville, Ky.—The proposed railroad between Louisville and Port Royal, S. C., is being promoted by a company of Tennessee parties, and it is also stated that Chicago capitalists are interested. The names of the promoters thus far announced include Jos. Upchurch and John S. Bowden.
 Monroeville, Ala.—A company called the Bay City & Sullivan Timber Co., it is reported, has decided to build a lumber line in Monroe county, which will be twenty-five miles in length. The company's mills are located at Mobile, Ala.
 Nashville, Tenn.—It is reported that Geo. Parker & Co. of Nashville desire to correspond with contractors about the construction of a railroad line. The company may be addressed at 85 Reade street, New York.
 Norfolk, Va.—A company entitled the Bay Shore Company is being organized to build another electric line from Norfolk to Ocean View. It is stated that H. L. Page is interested in the enterprise.
 Pineville, Ky.—It is reported that the Straight Creek Coal Co. has decided to build an electric line to mines which it proposes to open in the near future.
 Port Arthur, Texas.—The latest report concerning the Port Arthur, Houston & Western Railroad is to the effect that the right of way has been secured, and that construction work will begin in the spring of 1901. W. McDonald at Port Arthur is president of the company.
 Raleigh, N. C.—A correspondent of the Manufacturers' Record writes that the Great Eastern Railroad will traverse seven counties of North Carolina running by way of Fairmont, Snow Hill and Washington to Englehard. Messrs. Rosenberger & Livermore, 31 Nassau street, New York, are interested in the project.
 Richmond, Va.—A report is current that the Pennsylvania Railroad Company is negotiating with the Seaboard Air Line to secure its right of way between Richmond and Quantico, Va., with the view of building an extension to cover this distance. W. H. Brown at Philadelphia is chief engineer of the Pennsylvania.
 Sherman, Texas.—Arrangements have been made to complete the tracklaying upon the extension of the St. Louis & San Francisco Railroad between Sapulpa and Sherman as soon as possible. About eighty miles of track remain to be completed. Johnson Brothers & Faught, Sapulpa, I. T., are general contractors.
 Waynesboro, Miss.—A correspondent of the Manufacturers' Record writes that J. K. S. Pitts of Waynesboro is interested in the plan to build a railroad from Waynesboro to Womack Hill in Alabama, recently referred to in the Manufacturers' Record. The line, if built, will be thirty-five miles in length.

Street Railways.

Atlanta, Ga.—It is reported that the Atlanta Railway & Power Co. has taken up the plan to build a line to Marietta, in the suburbs.
 Birmingham, Ala.—It is officially announced that the work of changing the rail-

road line between Birmingham and Bessemer to a trolley system will begin as soon as possible. Robert Jamison is vice-president of the company.

Birmingham, Ala.—The work of constructing the branch of the Birmingham Light & Power Co.'s system to Owenton, in the suburbs, will be completed about January 1.

Galveston, Texas.—The city council has granted the Street Railway Co. a franchise for fifty years, with the authority to make a number of changes to its present system. It is understood that considerable of the line will be rebuilt. R. S. Lovett represents the owners of the road.

Knoxville, Tenn.—Negotiations are under way for an extension of the Knoxville Traction Co. to Fountain City, in the suburbs. C. C. Howell is general manager of the railroad company.

Natchez, Miss.—H. E. Campbell and James W. Lambert are interested in the Natchez Street Railway & Power Co., recently organized with \$150,000 capital stock.

Parkersburg, W. Va.—It is stated that the Parkersburg Gas, Electric & Street Railway Co. has become interested in the proposed railroad to Marietta, Ohio, a distance of thirteen miles, and that surveys are now being completed. C. H. Shattuck at Parkersburg is president of the railroad company.

Rome, Ga.—The proposed extension of the City Electric Railway to Lindale will be about five miles in length, and it is estimated will cost, including rolling stock, \$25,000. Seymour Cunningham is president of the company.

Savannah, Ga.—The city council has under consideration petitions of the Vernon Shell Road Co., also another corporation, to build electric lines in the city and suburbs. D. B. Lester is interested in the first-named company.

Wheeling, W. Va.—The combination of the several electric lines in Wheeling and suburbs, it is stated, will result in the extension of the service on a number of additional streets, as well as other improvements. T. H. Conderman is president of the Wheeling Railway Co., which has absorbed the others.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Air Chambers.—See "Galvanized-iron Work."
 Belting.—W. H. Gibbs & Co., Columbia, S. C., wants names of manufacturers of chain leather belting.
 Belting and Pulleys.—See "Woodworking Machinery."
 Boat Machinery.—Barataria Canning Co., Biloxi, Miss., is in the market for a Scotch marine boiler, 175 horse-power; compound engine, 150 horse-power; surface condenser, pump, twin-screw propeller, cylinder to be six inches in diameter, average steam pressure 100 pounds.
 Boiler.—Pomona Terra-Cotta Co., Pomona, N. C., wants one 8 to 10-horse-power second-hand boiler.
 Boiler.—Georgia Manufacturing Co., Gainesville, Ga., wants a condemned horizontal boiler, 2500 gallons capacity, one that will hold water; scrap-iron price.
 Boiler and Engine.—See "Boat Machinery."
 Boiler and Engines.—Masse & Carver, Roxboro, N. C., want to buy 50 to 60-horse-power tubular boiler, with fittings complete; 30 to 50-horse-power engine, central crank; 20 to 30-horse-power engine; also pulleys and belting.
 Bone Mill.—John A. Trullinger, Haw River, N. C., wants to buy a bone mill with elevators and screens with capacity of four or five tons of dry bone in ten hours; second-hand would do.
 Brick Machinery.—J. M. Echols, Carrollton, Ga., wants addresses of manufacturers of brick machinery.
 Bridge.—Jackson county will award contract at public outcry on January 7 for iron and steel bridge over Big creek, lately re-

ported, as per plans and specifications on file; Frank H. Lewis, clerk, Scranton, Miss.

Bucket and Tub Machinery.—See "Woodworking Machinery."

Cannery Outfit.—Carlisle (Ark.) Canning Co., F. P. Davis, secretary, is in the market for a complete canning outfit.

Corn Mill.—See "Flour Mill."

Cotton Mill.—B. L. Battle, secretary, Warrenton, Ga., wants estimates on 2500 mule spindles; also estimates on all mule spindles, yarn mill and supplies.

Cotton Mill.—Wanted.—Addresses of textile-machinery makers covering cotton-mill equipment, new, of about 5000 spindles and 150 looms. No power or pumping machinery wanted. State deliveries which can be made on machinery. Address M. D. Bringier, Burnside, La.

Distillery.—C. R. McNeely, Morganton, N. C., wants to correspond with manufacturers of steam distilling apparatus for corn and rye whiskey.

Electric-light Plant.—The city of Nashville, Tenn., will want bids next spring on a plant of 400 2000-candle-power and 5000 incandescent lamps to cost not more than \$150,000. Address J. M. Head, mayor.

Electric-light Plant.—City Power Co., A. E. Lennard, president, Jasper, Fla., is in the market for electric-light plant.

Elevators.—E. F. Acree & Bros., Danville, Va., will want a few elevators.

Engine.—Alabama & Georgia Iron Co., Noah H. Swayne, manager, Cedartown, Ga., is in the market for one 40-horse-power slide-valve engine, new or second-hand.

Engines.—Ernest Teague, Greensboro, N. C., wants prices on gasoline engines of four or five horse-power; second-hand preferred.

Excelsior Machinery.—Dexter Broom & Mattress Co., Pelzer, S. C., wants specifications and prices for small excelsior plant to be operated by steam-power.

Fencing, etc.—Jackson county will award contract at public outcry on January 7 at Scranton, Miss., for iron fence and pavement around the courthouse square, as per plans and specifications on file; Frank H. Lewis, clerk.

Fertilizer Machinery.—See "Bone Mill."

Flour Mill.—Oglesby & Brewer, Elberton, Ga., will receive estimates until December 17 for complete flour and corn-mill outfit, including power, etc.

Furniture Machinery.—See "Woodworking Machinery."

Furniture Machinery.—Welch Furniture Co., J. W. Harris, secretary, High Point, N. C., will buy machinery for furniture factory.

Furniture Machinery.—Fred H. Dominick, Newberry, S. C., wants to correspond with manufacturers of furniture machinery.

Galvanized-Iron Work.—Niagara Hydraulic Engine Co., Roanoke, Va., wants to contract for the manufacture of a lot of air chambers for hydraulic rams; chambers to be made of wrought or galvanized iron.

Gasoline Engines.—See "Engines."

Gasoline Pump.—See "Pump."

Hydraulic Rams.—Fred W. Haward, 520 Gardner Building, Jacksonville, Fla., wants addresses of manufacturers of hydraulic rams.

Hydraulic Rams.—Wanted.—One or more hydraulic rams. Address William Moore Angus, Jacksonville, Fla.

Ice Plant.—City Power Co., B. E. Lennard, president, Jasper, Fla., is in the market for ice machinery, probably 10-ton plant.

Kindling-wood Machine.—Virginia Excelsior Co., Fredericksburg, Va., wants a kindling-wood machine.

Lumber.—J. F. Alman & Bro., Jonesville, S. C., want to purchase rough white pine three-quarters inch and one and one-half inches thick, car lots, stock suitable for making packing boxes.

Machine Tool.—W. J. Clark Co., Salem, Ohio, is in the market for an extra heavy 36-inch squaring shear for cutting three-eighths plate and lighter.

Machine Tools.—L. M. Edgerton, New Berne, N. C., wants prices on tools and supplies for bicycle repair shop.

Mining and Milling Machinery.—E. Sheridan, 55 Broadway, New York, wants a second-hand 10-stamp mill (one now in the South preferred).

Mining Equipment.—R. H. Hanna, P. O. Box 22, Knoxville, Tenn., wants a 15-16-inch diamond drill and fixtures for lead and zinc.

Paper Cutter.—Hood Manufacturing Co., Wheeling, W. Va., wants to buy a 40-inch paper cutter for blocking out mats.

Paper-bag Machinery.—William H. Coleman, care of "Howard House," Baltimore, Md., wants to buy machinery for making a

patent paper bag; full information is solicited.

Peanut-oil Manufacturers.—H. B. Fant & Son, S. Main street, Anderson, S. C., want addresses and information of factories making and refining peanut oil; also want value of crude and refined peanut oil (approximate).

Printing Estimates.—Carlisle Canning Co., F. P. Davis, secretary, Carlisle, Ark., wants estimates on stock certificates, both lithographed and printed.

Pulleys and Belting.—See "Boiler and Engines."

Pump.—B. D. Brantley, Blackshear, Ga., wants a direct-connected gasoline pump, capacity ten gallons water per minute, lift fifty feet.

Railway Construction.—Cincinnati & Licking River Railroad Co., E. J. Hunter, secretary, Brooksville, Ky., has estimates ready on thirty miles of road for contractors who may desire to bid.

Road Machinery.—Camp Manufacturing Co., Franklin, Va., wants addresses of road-machine manufacturers; company does not refer to steam shovels, but to the ordinary machines worked by men and team.

Road Machinery.—Hon. T. F. Thomas, chairman "County Commissioners," Gainesville, Fla., is in the market for road machinery.

Roaster.—E. S. Hutchin Manufacturing Co., 1308 Union avenue, Kansas City, Mo., contemplates purchasing roasting plant and spice mills.

Saw-mill.—George Foundry and Machine Works, Rome, Ga., wants catalogue of the Stearns saw-mill.

Saw-mill Machinery.—See "Kindling-wood Machine."

Shoe Machinery.—J. C. Stewart, Winston, N. C., wants addresses of manufacturers of shoe machinery.

Slack-barrel Machinery.—W. W. Daves, Cartersville, Ga., wants addresses of manufacturers of slack-barrel machinery.

Spice Mill.—See "Roaster."

Stationery.—See "Printing Estimates."

Stone-sawing Gangs.—Carrington & Gonnella, Sanford, N. C., want prices on gang mill to saw stone ten feet long, with necessary pulleys and shafting; also prices on 40-horse-power boiler and 30-horse-power engine; second-hand, if in first-class condition.

Surveying Equipment.—Albert Wilson, Tabbot, N. C., wants a land surveying outfit and a guide or "ready reckoner" to same.

Telephone Supplies.—Roanoke & Botetourt Telephone Co., L. A. Noel, president, Fincastle, Va., is constantly in the market for telephone supplies.

Vehicle Wheels.—See "Wheels, etc."

Water-works.—E. O. Mahony, secretary "Commissioners Improvement District," El Dorado, Ark., will receive sealed proposals until December 28 for constructing water-works; bids will also be received for superintending construction, all according to plans and specifications on file. Apply to N. C. Marsh for plans.

Wheels, etc.—Louis M. J. Becker, Fairmount and Milton avenues, Baltimore, Md., wants addresses of makers of goat-wagon and baby-carriage gears or wheels that include wheel and axle.

Woodworking Machinery.—Benbow-Brammer Manufacturing Co., St. Louis, Mo., will need some machinery for making round tubs for its washers.

Woodworking Machinery.—See "Furniture Machinery."

Woodworking Machinery.—O. D. Murray & Co., Catawba, N. C., want prices on lathe mills, shingle mills, belting and pulleys.

Woodworking Machinery.—Miller & Miller, Richmond, Va., will be in the market for full line of machinery for sash, door, blind and box factory.

Woodworking Machinery.—Geo. W. Wright, Salisbury, N. C., wants catalogues and prices on machinery for making wardrobes, chairs and tables.

Woodworking Machinery.—Fred H. Dominick, Newberry, S. C., wants to correspond with manufacturers of machinery for making barrel staves.

Woodworking Machinery.—Southern Seating & Cabinet Co., Jackson, Tenn., will need a new cabinet planer and rip saw.

TRADE NOTES.

Improved Suction-Hose Couplings.—The fire marshal of Joliet has been trying the new kind of suction-hose couplings recently patented by the W. J. Clark Co. of Salem, Ohio, maker of the now quite famous "Quick as Wink" couplings. He says: "I put them on the suction of my steamers

about four months ago, and have been using them ever since. One man can now connect the steamers with the hydrants, where it took four men before, and took them ten times as long." If that is true, the new couplings will be extensively used, for there are many towns where the water pressure is not sufficient at the hydrant to supply steam fire engines, and the big armored suction hose that must be used is not easily or quickly connected by one or two men with the common couplings.

New Process Rawhide.—The use of rawhide on various characters of machinery has been general for some years. The hard usage to which such rawhide is put necessitates the utmost care in its manufacture as well as in the selection of the raw material. More than this, the production of rawhide gears and pinions, washers, bushing, mallets, etc., has become a special industry, and some of the most ingenious inventors and machinists have devoted their efforts to its perfection. A most prominent manufacturer in this branch of industry is the New Process Rawhide Co. of 248 West Railroad street, Syracuse, N. Y. This company was established in 1888, and its product is the result of ten years' experience and experiment. It has specially-designed machinery in a specially-designed machine shop for making its rawhide products, and its skilled employees have been continuously retained. The company buys carefully-selected green hides and processes them from start to finish, eliminating the useless material without damage to the actual animal fiber and still retaining the full natural strength. This "New Process Rawhide" is then converted into spur, bevel and friction gears, this being the company's special work; it also makes bushings, washers, gear blanks, etc. The leading characteristics of the product are its ability to wear as long as metal or any known composition, its noiselessness, its cleanliness, the use of lubricants being entirely unnecessary, and the absence of vibration in machines on which it is used. The rawhide gears have been used with entire satisfaction on electric motor cars (the hardest possible service), on roller mills, elevators, machine tools and many other classes of machinery, both geared and not geared. Booklet presenting further particulars regarding the New Process Rawhide Co.'s product may be obtained on application.

Mechanical Draft's Advantages.—Within the past few years there has developed a decided sentiment in favor of forced or induced draft in land installations. The fitness of this form of draft for marine work, where tall chimneys are to be avoided, is readily conceded, and, following the precedent there established, the use of mechanical draft is extending to stationary plants. Natural draft depends upon the difference in temperature between the gases inside and outside the chimney, and is greater accordingly as the smoke and gas from the furnace pass out in a more highly heated state. But this entails a great loss of heat which might otherwise be used to better advantage. True, the introduction of an economizer into the flue space has the effect of absorbing some of this excess heat and returning it to the boiler through the water. Yet even the economizer dare not consume too much, or the temperature of the flue gases will be so much reduced as to seriously impair the effect of the draft. Here, then, is where forced draft scores a point. By means of a fan or centrifugal blower the combustion can be made more perfect, owing to a nicety of regulation of the air supply, and therefore the gases will reach their maximum temperature. The economizer may then absorb every unit of heat that escapes into the stack, if possible, without detriment to the draft, since the pressure from the blower furnished this. By this combined installation of economizer and forced draft a saving of 15 per cent. has been made in cases where fuel was costly and the feed water low in temperature. More than this, it costs less to install a mechanical-draft apparatus than to build a suitable chimney for natural draft. And then it is possible to secure a more complete utilization of the waste heat than by ordinary methods. Poor grades of coal may be used in connection with mechanical draft to great advantage, thus lessening the cost of coal supply. Again, there is no chance of the efficiency of the draft being influenced by the weather. If the draft tends to become weak the fan may be speeded up to keep it uniform, and if, under the stress of some sudden emergency, it is found necessary to generate more steam in a short time, an increase in the force of the draft, directly under the control of the engineer, makes quick response to demand. This system is most flexible, and is adaptable to any and all situations.—The Practical Engineer.

TRADE LITERATURE.

Graphite Lubricant in Squirrel Can.—Probably many users of lubricants do not know that Dixon's Pure Flake Graphite can be used in an ordinary squirrel can. The convenience and efficiency of the method is patent. That is one fact gleaned from "Graphite," the December number of which has just been issued. This publication contains many other facts of interest. It is issued for the purpose of establishing a better understanding in regard to the different forms of graphite and their respective uses, and those who are interested may obtain specimen copy on application. Address the Jos. Dixon Crucible Co., Jersey City, N. J.

Many Good Points.—"Brushy Mountain Coal has even more good points than we send you enclosed." With this introductory statement the Crooked Fork Coal & Coke Co. of Petros, Tenn., sends to its friends and customers a handsome needle book containing about every variety of needle demanded in domestic sewing; also containing a few remarks on concentrated energy or steam coal, the force that moves the world onward to a greater and higher civilization. The company claims that its product is the highest type of concentrated energy, and that its use is certain to save dollars in the running of plants. Coal buyers are invited to obtain prices.

Pneumatic Tools.—The favor with which pneumatic tools are being received is marked and increasing constantly. In foundries and other industrial establishments these tools are proving their efficiency and their superiority over many old-style tools. Several leaflets referring to the pneumatic tools of the Philadelphia (Pa.) Pneumatic Tool Co. have been issued. The tools include the rammer (hand size for foundry work), power rammers (for heavy work), hammers (for chipping and calking) and rotary drills. The company also manufactures riveting hammers, yoke riveters, piston drills, wood-boring machines, foundry sand rammers, air-motor chain hoists, flue cutters, flue rollers, stone hammers and surfacing machines.

In Uncongenial Work? Then Free Yourself!—A man's hands may be tied to uncongenial work, but in these days of so many advantages in all lines of endeavor he need not remain indefinitely in that work. If the effort to free oneself be present the means of bettering his knowledge, and thereby making him available and worthy of promotion, are also at hand. The International Correspondence Schools of Scranton, Pa., has been the means of bettering the condition of very many workers in the trades and engineering professions through its system of instruction by correspondence and study during idle hours. If these facts interest you write the school for copy of pamphlet telling of the plan in general, or for pamphlets on special trades and professions.

For Ice Manufacturers.—Ice-making and refrigeration is a branch of industry that requires minute and careful attention in order that the most satisfactory results may be attained. The running of the machinery and the care of the water used are important details. A long practical experience in the lubrication and general erection of ice machinery has resulted in the issuance of a booklet entitled "Some Cold Facts" by the Garfield Oil Co. of Cleveland, Ohio. The suggestions contained therein are of special interest to ice manufacturers. The booklet tells in plain words of the merits of De Bergh ice-valve oil, engine and dynamo oil, ice-machine ammonia oil and special boiler compound; also the Zanzibar anti-rust paint, all of which can be used to great effect in ice and cold-storage plants.

Transportation of Materials.—The selection of equipment for transportation of materials for factories, mills, mines, plantations and hotels is frequently a perplexing question. To supply the demand for an equipment for transportation service in such plants as are mentioned the "Telpherage" system was invented, and is now being introduced. There are many factories, the products of which are mostly composed of articles which are not of excessive weight, where the installation of a "Telpherage" plant would be a great saving in general expenses. The system is entirely automatic, and utilizes electricity for motor power, and the expense of its maintenance and operation is claimed to be but nominal. Illustrated leaflets explaining in detail the system may be obtained by addressing the Consolidated Telpherage Co., 20 Broad street, New York.

Perfect Insulation.—Perfect insulation has long been aimed at by many constructors of

ice and cold-storage plants and the various other structures and machinery requiring insulation. The manufacture of special materials has been evolved because of the demand for perfect insulation, and manufacturers have utilized new ideas in producing them. "Lith" is an insulating material for which its makers make broad claims for efficiency, durability, convenience in application and general excellence. It will deaden flooring, it is thoroughly antiseptic, odorless and sound-proof, and machinery builders, architects and building contractors are constantly specifying it. It would be difficult to enumerate the many places in which "Lith" can be applied to advantage, but mere mention may be made of cold-storage buildings, packing-houses, breweries, refrigerator cars, schools, apartment buildings, residences, etc. The manufacturer of "Lith" is the Cellular Insulating Co. of Cincinnati (office in Mitchell Building), and its pamphlet "Perfect Insulation" is gratis to those who are interested and request copy.

"A B C" Engines.—High speed, continuous service and neglect are three elements universally encountered in blower work. Coupled with them is the unvarying necessity of close regulation of speed. It therefore becomes apparent that blower work requires an engine of the highest class in design, material, workmanship and finish to withstand the strain and wear of such service. Such the American Blower Co. of Detroit claims its engines to be, and as evidence that they are points with pride to the hundreds which have been in constant service for years, many of them running continuously twenty-four hours a day every day in the year, some of them in the most out-of-the-way places, and the majority being subjected to the most flagrant neglect. These engines are specially adapted to dynamo driving, where the utmost refinement in regulation of speed is particularly necessary. They are manufactured in large lots by special tools, all parts being perfectly interchangeable. Duplicate parts being carried in stock, repairs can be shipped immediately. New catalogue is now ready for distribution.

Saco & Pettie Machine Shops.—The extraordinary activity displayed during the past several years in the erection of new cotton mills in the South and the enlargement of established plants has resulted in many and large contracts for the textile machinery makers of the North. One of the most prominent of these machinery makers is the Saco & Pettie Machine Shops of Newton Upper Falls, Mass. This company has been designing and building cotton machinery for many years, and its success is attested by the multitude of textile mills in all sections of America, and even other countries, utilizing its machinery. The Saco & Pettie Machine Shops constitute one of the most complete plants of its character in existence. A bird's-eye view of the establishment has been photographed with a perfection not always attained in this branch of science, and a copy of the reproduction in a tasteful frame has been received by the Manufacturers' Record. The picture makes a handsome addition to the gallery of any office, and is a constant reminder of the supremacy which the Saco & Pettie establishment has gained in its chosen field.

Motor-Driven Air Compressors.—The rapid increase in the number of electric cars, both for elevated and surface roads, and the more extensive use of electricity as a source of power generally has created a growing demand for small electrically-operated air compressors adapted to supply compressed air for car brakes and train signals, as well as for various other industrial uses. To supply this demand the Westinghouse Air Brake Co. of Pittsburgh has designed and perfected by careful tests and experiments a line of motor-driven air compressors, simple in construction and of the highest efficiency. The use of the very best materials and the employment of labor especially skilled in air-brake work have produced a result which will fully sustain the company's reputation for mechanical supremacy in this respect. Realizing the importance of compactness, both motor and compressor have been designed to occupy the smallest possible space consistent with such ample size of all wearing parts as will insure great durability and consequent low cost for maintenance. This purpose has been accomplished without sacrificing anything to cheapness or lightness of construction; on the contrary, all the parts especially subject to shocks or strains of any kind are of more than usual dimensions. Three views of the combined pump and motor are shown in illustrations in the new catalogue just issued. Applications for catalogue are invited.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

New Corporations.

S. S. Broadus and others are interested in a new bank to be opened at Russellville, Ala.

The Dime Savings Bank of Baltimore has been organized by J. Hume Smith and others, with \$100,000 capital stock.

The Federal Savings Bank of Maryland has been incorporated by Robert H. Smith, James E. Ingram and others of Baltimore.

The Frankenthal Investment Co. of St. Louis has been incorporated, with \$100,000 capital stock, by Alexander Frankenthal and others.

The Maryland Chattel Loan Association has been incorporated at Baltimore by Albert Blume, Jr., and others, with \$5000 capital stock.

C. H. Crawford and others are interested in the Farmers and Merchants' National Bank, recently organized at Plano, Texas, and capitalized at \$50,000.

The Standard Investment Co. has been incorporated in West Virginia by O. B. Zantlinger and others of Baltimore. It is understood that the company will have its headquarters in Baltimore.

The National Trust Co., recently organized at Baltimore, has elected M. R. Creighton, president; George Savage and J. H. Purnell, vice-presidents; J. M. Garrett, Jr., secretary and treasurer. It is stated that this company will restrict its operations to a certain line of business, and will not do a general trust and banking business.

New Securities.

The city of Bessemer, Ala., is considering an issue of \$85,000 in improvement bonds. Address the mayor.

The Johnson City Bank & Trust Co. of Johnson City, Tenn., has decided to increase its capital stock to \$37,500.

The town of Dothan, Ala., has been authorized by the legislature to issue \$30,000 in bonds. Address the town clerk.

The town of Avondale, Ala., will issue \$25,000 in bonds if authority is obtained from the legislature. Address the town clerk.

The State legislature is considering a proposed issue of \$100,000 in bonds of the town of Gadsden, Ala. Address the mayor.

The city of Gainesville, Texas, will probably issue \$5000 worth of 4 per cent. bonds in the near future. Address the mayor.

Bids will be received until December 20 for the issue of \$45,000 in 5 per cent. bonds of Greenville, Ala. Address the mayor.

Carson county, Texas, has decided to issue \$15,000 in 4 per cent. bonds. The board of commissioners may be addressed at Panhandle, Texas.

An amendment has been filed to the charter of the Tennessee Central Railway Co., increasing its capital stock from \$20,000 to \$25,000 per mile.

The legislature has authorized the issue of \$40,000 in bonds of Lauderdale county, Alabama. The board of commissioners may be addressed at Florence.

The town of Jasper, Ala., has been authorized by the legislature to place on the market \$15,000 in bonds for school purposes. Address the town clerk.

A bill is pending in the legislature authorizing Jefferson county, Alabama, to issue \$500,000 in bonds for improvements.

The board of commissioners may be addressed at Birmingham.

A bill is pending in the Alabama legislature authorizing Montgomery county to issue \$500,000 in improvement bonds. The board of commissioners may be addressed at Montgomery.

It is announced that the Dimmick Pipe Co. of Birmingham, Ala., will issue \$100,000 in bonds to be secured by a mortgage on the company's property. The bonds will bear 6 per cent. interest.

Bids will be received until December 20 for \$59,000 worth of the recent issue of bonds decided upon by Floyd county, Georgia. J. B. Hill, county treasurer, may be addressed at Rome, Ga.

The stockholders of the Birmingham Railway, Light & Power Co. of Birmingham, Ala., have ratified the decision to issue \$3,500,000 in bonds bearing 5 per cent. interest upon the property which it now controls.

The issue of bonds of the town of Talladega, Ala., amounts to \$50,000, and will bear 5½ per cent. interest. It is stated that they will probably be placed on the market in the near future. Messrs. Dryer & Webb are city attorneys.

Mr. William C. Page, president of the Calvert Bank of Baltimore, writes the Manufacturers' Record that arrangements are being made to erect a banking house, and that organization has been completed. The institution will do a commercial and savings business.

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending December 11.

| | Bid. | Asked. |
|------------------------------------|------|--------|
| Abbeville Cotton Mills (S. C.) | 97 | 101 |
| Aiken Mfg. Co. (S. C.) | 95 | 99 |
| American Spinning Co. (S. C.) | 100 | 110 |
| Anderson Cotton Mills (S. C.) | 130 | 135 |
| Arcade Cotton Mills (S. C.) | 95 | 100 |
| Arkwright Mills (S. C.) | 122 | 126 |
| Augusta Factory (Ga.) | 83 | 88 |
| Avondale Mills (Ala.) | 80 | 84 |
| Belton Mills (S. C.) | 104 | 105½ |
| Bennettsville Mfg. Co. (S. C.) | 105 | 110 |
| Cannon Mfg. Co. (N. C.) | 180 | 190 |
| Cabarrus Cotton Mills (N. C.) | 148 | 155 |
| Clifton Mfg. Co. (S. C.) | 180 | 190 |
| Clinton Cotton Mills (S. C.) | 120 | — |
| Courtenay Mfg. Co. (S. C.) | 117 | 120 |
| Darlington Mfg. Co. (S. C.) | 98 | 101 |
| Delgado Mills (N. C.) | 100 | 102½ |
| Engle & Phelps Mills (Ga.) | 102 | 106 |
| Edna Cotton Mills (N. C.) | 120 | 125 |
| Enoree Mfg. Co. (S. C.) | 120 | 123 |
| Enterprise Mfg. Co. (Ga.) | 100 | 103½ |
| F. W. Poe Mfg. Co. (S. C.) | 125 | 129 |
| Gaffney Mfg. Co. (S. C.) | 122½ | 125 |
| Granby Mills (S. C.) | 100 | 103 |
| Granby Mills (S. C.) 1st Pfd. | 104 | 106 |
| Greenville Mfg. Co. (S. C.) | 160 | 170 |
| Greenwood Cotton Mills (S. C.) | 102 | 104 |
| Grendel Mills (S. C.) | 102 | 104 |
| Henderson Cotton Mills (N. C.) | 120 | 125 |
| Henrietta Mills (N. C.) | 197 | 210 |
| John P. King Mfg. Co. (Ga.) | 101 | 105 |
| Langley Mfg. Co. (S. C.) | 114 | 121 |
| Laurens Cotton Mills (S. C.) | 143 | 150 |
| Lockhart Mills (S. C.) | 110 | 113 |
| Louise Mills (N. C.) | 125 | 128 |
| Lynchburg Cotton Mills (Va.) | 135 | 150 |
| Lynchburg Cotton Mills (Va.) Pfd. | 145 | 150 |
| Manchester Cotton Mills (S. C.) | 110 | 115 |
| Mayo Mills (N. C.) | 125 | 130 |
| McColl Mfg. Co. (S. C.) | 120 | 125 |
| Modena Cotton Mills (N. C.) | 140 | 145 |
| Newberry Cotton Mills (S. C.) | 115 | 121 |
| Orell Mfg. Co. (N. C.) | 110 | 116 |
| Orr Mfg. Co. (S. C.) | 103½ | 106 |
| Pacolet Mfg. Co. (S. C.) | 250 | 275 |
| Pelzer Mfg. Co. (S. C.) | 180 | 185 |
| Piedmont Mfg. Co. (S. C.) | 175 | 185 |
| Raleigh Cotton Mills (N. C.) | 120 | 125 |
| Richland Cotton Mills (S. C.) | 100 | 102 |
| Richland Cotton Mills (S. C.) Pfd. | 100 | 105 |
| Roanoke Mills (N. C.) | 105 | 110 |
| Sibley Mfg. Co. (Ga.) | 84 | 89 |
| Southern Cotton Mills (N. C.) | 95 | 97½ |
| Spartan Mills (S. C.) | 130 | 135 |
| Trion Mfg. Co. (Ga.) | 125 | 130 |
| Tucapau Mills Co. (S. C.) | 128 | 138 |
| Union Cotton Mills (S. C.) | 137 | 140 |
| Union Cotton Mills (S. C.) Pfd. | 102 | 104 |
| Victor Mfg. Co. (S. C.) | 108 | 112 |
| Victor Cotton Mills (N. C.) | 70 | 76 |
| Warren Mfg. Co. (S. C.) | 84½ | 90 |
| Waring Mfg. Co. (S. C.) Pfd. | 105½ | 110½ |
| Wilmington Cot. Mills (N. C.) Pfd. | 110 | 115 |
| Wiscasset Mills (N. C.) | 120 | 126 |
| Whitney Mfg. Co. (S. C.) | 122½ | 130 |

Engine and Turret Lathes.—Engine and turret lathes constitute a most important class of the machines used by modern manufacturers in the metal industries. The construction of these lathes involves the most modern machinery equipment, patterns of special features, the best materials and the highest of skilled workmanship. Such a combination of advantages has enabled the Rahn-Mayer-Carpenter Company of Cincinnati, Ohio, to develop the high reputation which its lathes have both at home and abroad. The demand for these lathes is constantly increasing.

TABLE OF CONTENTS.

| EDITORIAL: | Page. |
|--|-------|
| A Southern Success..... | 353 |
| To Help Industry..... | 355 |
| The Charleston Exposition..... | 355 |
| Wildcat Investment Schemes..... | 355 |
| Cotton Mills as Missionaries for the South..... | 355 |
| English Iron Men Looking to America..... | 357 |
| Pointing to South Africa..... | 357 |
| An Ally of Commerce..... | 357 |
| Not Promotive of Good..... | 357 |
| Would Manufacture Ice..... | 357 |
| Abrasive Manufacturing..... | 357 |
| The Cullom Bill and the League of National Associations..... | 358 |
| The New South..... | 358 |
| Industries in Mexico..... | 358 |
| Wrought by Prosperity..... | 358 |
| Oil in Kentucky..... | 358 |
| The Pig-Iron Market..... | 358 |
| The Iron and Metal Trades..... | 358 |
| Iron-Making in South Carolina..... | 358 |
| A Dangerous Measure..... | 358 |
| Outlook for Cotton..... | 358 |
| FOREIGN TRADE: | |
| Developing Shipbuilding..... | 358 |
| For Savannah's Harbor..... | 358 |
| Exports to the Asiatic Market..... | 358 |
| Lake Steamers for Ocean Traffic..... | 358 |
| To Advertise New Orleans..... | 358 |
| New Line to Mexico..... | 358 |
| Roundup-Bale Exports..... | 358 |
| Notes..... | 358 |
| RAILROADS: | |
| 400 Miles of Line..... | 358 |
| An Important Project..... | 358 |
| Freight on Southern Lines..... | 358 |
| Baltimore to Cape May..... | 358 |
| An Illinois Central Report..... | 358 |
| An Important Project..... | 358 |
| A Pennsylvania Rumor..... | 358 |
| Electric Lines Combine..... | 358 |
| Earnings Increasing..... | 358 |
| Western Maryland Construction..... | 358 |
| Will Operate It..... | 358 |
| Rails and Rolling Stock..... | 358 |
| Fast Time on a New Line..... | 358 |
| Railroad Notes..... | 358 |
| To Improve the Mississippi Delta..... | 358 |
| The National Realty and Loan Society..... | 358 |
| TEXTILES: | |
| Labor in Cotton Mills..... | 358 |
| The Spinners Determined..... | 358 |
| Contracts for \$200,000 Mill..... | 358 |
| \$300,000 Spinning and Knitting Mill..... | 358 |
| The Cotton Movement..... | 358 |
| Ashby Cotton Mills..... | 358 |
| Textile Notes..... | 358 |
| Quotations of Cotton Yarns..... | 358 |
| Cottonseed-Oil Notes..... | 358 |
| PHOSPHATES: | |
| Florida Phosphates..... | 358 |
| Phosphate Markets..... | 358 |
| Phosphate and Fertilizer Notes..... | 358 |
| MECHANICAL: | |
| Modern Lathes (Illus.)..... | 358 |
| Double-Cylinder Flooring Machine (Ill.)..... | 358 |
| New Fencing Pliers (Illus.)..... | 358 |
| Modern Steam Shovel (Illus.)..... | 358 |
| Coffee Mills (Illus.)..... | 358 |
| Double-Pole Lightning Arrestor (Illus.)..... | 358 |
| LUMBER: | |
| Lumber Market Reviews: | |
| Baltimore..... | 358 |
| Savannah..... | 358 |
| Pensacola..... | 358 |
| Mobile..... | 358 |
| New Orleans..... | 358 |
| Lumber Notes..... | 358 |
| Trade Notes..... | 358 |
| CONSTRUCTION DEPARTMENT: | |
| New Enterprises..... | 358 |
| Building Notes..... | 358 |
| Railroad Construction..... | 358 |
| Machinery Wanted..... | 358 |
| Trade Literature..... | 358 |
| FINANCIAL NEWS: | |
| New Corporations..... | 358 |
| New Securities..... | 358 |
| Southern Cotton-Mill Stocks..... | 358 |

ing. The company has issued a descriptive and illustrated catalogue of its product. Present or prospective lathe users are invited to acquaint themselves with the merits of this product.

Reduced Rates to Pittsburg, &c., via Pennsylvania Railroad.

The Pennsylvania Railroad Co. announces that on December 23, 24, 25, 26 and January 1 it will sell excursion tickets from Washington and Baltimore to Pittsburg, Connellsville, Uniontown, Dravosburg, Scottsdale, Bradock, Dunbar, Fairchance, Mt. Pleasant, Johnstown, Cumberland, Hyndman and Frederick, good to return until January 4, 1901, inclusive, at rate of a fare and a third for the round trip.